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#### **ABSTRACT**

This guidebook is a comprehensive national directory of federal offices, programs, and facilities supporting K-12 education in the subject areas of mathematics and science. It is intended to inform educators and the public about federally supported resources and to increase access to them. This publication contains information on federal offices and programs at the national and regional levels and also lists state-by-state contacts for many of these resources in regions. Section 1 of this publication identifies contacts for national programs administered by each federal agency or department, while section 2 lists state highlights by region, and alphabetically by state or territory. (ASK)

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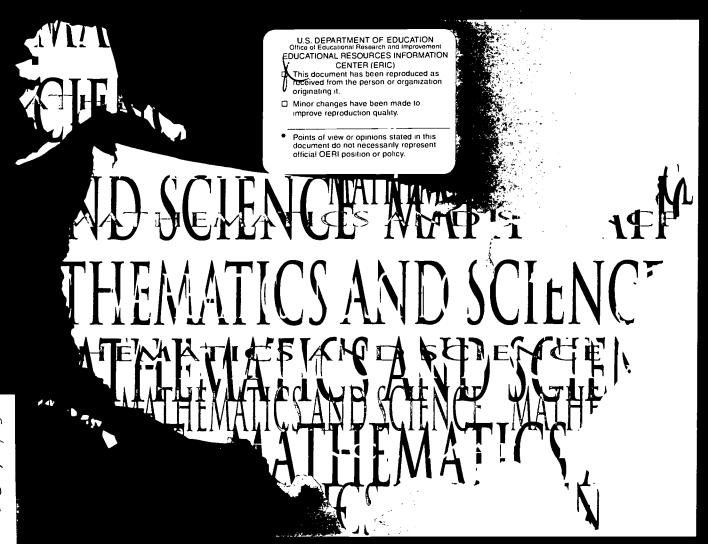
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# The Guidebook of Federal Resources for K-12 Mathematics and Science



Eisenhower National
Clearinghouse
for Mathematics and
Science Education



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The Guidebook of Federal Resources for K-12 Mathematics and Science was produced by the Eisenhower National Clearinghouse for Mathematics and Science Education (ENC). Comments or corrections should be forwarded to ENC.

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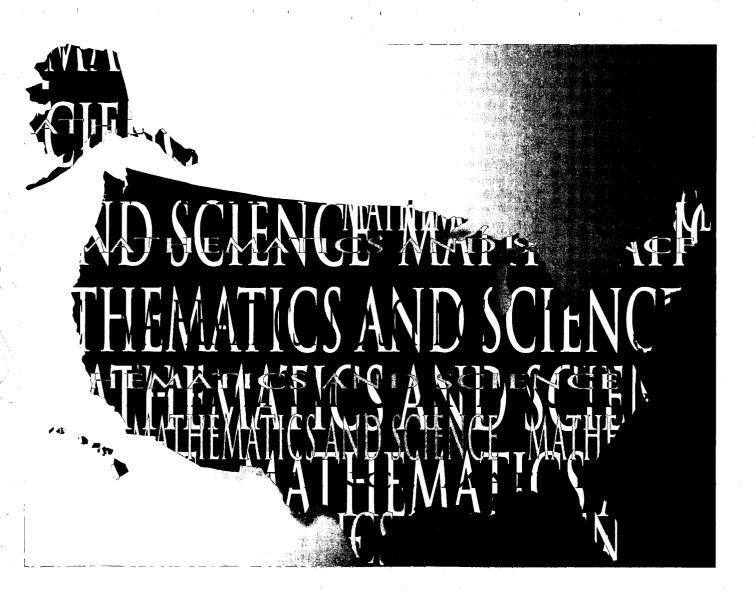
Special Thanks to: Eisenhower Regional Consortia for Mathematics and Science Education



# The Guidebook of Federal Resources for K-I2 Mathematics and Science



Eisenhower National Clearinghouse for Mathematics and Science Education







### UNITED STATES DEPARTMENT OF EDUCATION

OFFICE OF THE ASSISTANT SECRETARY FOR EDUCATIONAL RESEARCH AND IMPROVEMENT

### Dear Reader:

The Guidebook of Federal Resources for K-12 Mathematics and Science is a comprehensive national directory of Federal offices, programs, and facilities supporting K-12 education in these subject areas. It is intended to inform educators and the public about Federally supported resources and to increase access to them. This publication contains information about Federal offices and programs at the national and regional levels and also lists state-by-state contacts for many of these resources in your region.

This is the fourth edition of the Guidebook prepared by the Eisenhower National Clearinghouse (ENC). Information in this publication is also available in electronic format as part of ENC's effort to provide online information and resources, including an extensive catalog of K-12 curriculum materials. Distribution of the Guidebook will also take place through the Eisenhower Regional Consortia, which work in collaboration with ENC to provide technical assistance and disseminate information to improve mathematics and science education.

This publication is part of an ongoing effort of the Office of Educational Research and Improvement and of the entire U.S. Department of Education to bring about educational reform and answer the President's Call to Action for American Education in the 21st Century. The Eisenhower National Clearinghouse and Regional Consortia, working together, are a significant force for reaching National Education Goal Five, that American students will be first in the world in mathematics and science achievement by the year 2000.

We believe you will find The Guidebook of Federal Resources for K-12 Mathematics and Science to be a valuable tool as you seek ways to enrich students' learning and to improve their performance in mathematics and science.

Sincerely,

Ronald W. Cartwright **Acting Director** 

Office of Reform Assistance

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and Dissemination



WASHINGTON, D.C. 20208-

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### **Foreword**



The Eisenhower National Clearinghouse for Mathematics and Science Education (ENC) is pleased once again to publish *The Guidebook of Federal Resources for K–12 Mathematics and Science*. This directory is part of our continuing effort to identify and disseminate information about materials and programs that strengthen mathematics and science education in the United States. Section One of this publication identifies contacts for National programs administered by each Federal agency or department, while Section Two takes a regional approach, listing Federally funded programs in each State and Territory.

Located at The Ohio State University, the Clearinghouse is funded through a contract with the Office of Educational Research and Improvement of the U.S. Department of Education. The major mission of ENC is to provide K–12 teachers with a comprehensive source of information about mathematics and science education. In addition, ENC works closely with the Eisenhower Regional Consortia in the National effort to support systemic educational reform. The Consortia and the Clearinghouse collaborate to identify and distribute curricular materials for K–12 mathematics and science as well as products and services that enhance the professional development of teachers and other educators.

ENC produces a variety of print publications and CD-ROMs available free to educators. In addition, all ENC materials, including this *Guidebook*, are available through ENC Online, a World Wide Web site accessible via the Internet and by modem through a toll-free number. For details on how to receive ENC publications or how to access ENC Online, refer to the following pages.

I wish to thank the representatives of the Federal agencies and the Regional Consortia who provided information included in this *Guidebook*. I also wish to acknowledge the support provided by Aspen Systems Corporation and the work of the ENC Publications team who made this edition of *The Guidebook* possible.

Len Simutis, Director

les Junts

Eisenhower National Clearinghouse for Mathematics and Science Education



### **About The Guidebook and ENC**

### How to Use The Guidebook

The purpose of this *Guidebook* is to assist educators, parents, and students across the country in attaining the National Education Goals, particularly Goal 5:

By the year 2000, U.S. students will be first in the world in science and mathematics achievement.

The Guidebook is intended to improve educators' awareness of the Federal Government's extensive commitment to mathematics and science education. Sixteen Federal agencies collaborated with the Eisenhower National Clearinghouse (ENC) to produce this publication. Although The Guidebook contains valuable information for anyone involved in mathematics and science education, its focus is on the elementary and secondary levels. Programs described include those that assist students who will go on to study in college or technical school as well as programs intended to improve general mathematics and science literacy.

The Guidebook consists of two sections:

### **Section One: Agency Overviews**

Section One contains general information about each of the 16 agencies. Listed alphabetically, each overview highlights that agency's involvement in mathematics and science education and acquaints readers with agency-specific background information. Also listed are nationwide mathematics and science programs for elementary and secondary education sponsored by each agency. Each entry includes the program name, a brief description, and contact information.

### Section Two: State Highlights by Region

Section Two lists, by region, Federally funded programs and resources available in each State and Territory. Each of the ten regional subsections begins with a description of the Eisenhower Regional Consortium serving that part of the country. By referring to the State-by-State listings of facilities and contacts for mathematics and science education, readers can easily discover what resources are available locally.

No one resource can list all Federal education programs, but this directory does provide contacts that can supply additional information. For added convenience, *Guidebook* contents are also available through ENC Online at http://www.enc.org.

### **About ENC**

The U.S. Department of Education recognizes the efforts expended by mathematics and science educators to develop standards and improve their teaching. The Department also recognizes the need to identify and collect useful materials and to disseminate information about successful programs, especially those emanating from Federal support.

ENC was established in 1992 to provide K-12 teachers with a central source of information about mathematics and science curriculum materials. Since that time, ENC has fulfilled its mission through development of the growing ENC collection of resources. In addition, ENC has gone on to promote excellence in mathematics and science education through the creation of a variety of products and services, described below.

### **ENC Collection**

ENC has acquired and cataloged several thousand items, including print materials, video, audio, graphic images, software, kits, and Internet resources from a variety of sources, including Federal and State agencies, commercial publishers, and professional associations. Materials collected are held in two ENC repositories, one at The Ohio State University in Columbus, Ohio, and one in Washington, DC, in collaboration with The George Washington University. Categories of materials include the following:

▶ Printed Documents such as activity guides, teacher and student guides, sourcebooks, reference materials, textbooks, program descriptions, published articles, directories, bibliographies, and technical information about instructional equipment.

- Magnetic and Optical Media such as software, images (e.g., GIF, JPEG, EPS), CD-ROMs, optical and laserdiscs, videotapes, and audiotapes.
- Projected Media such as films, slides, filmstrips, overhead transparencies, microfiche, and microfilm.
- Real Objects such as kits, manipulative materials, microcomputer-based packages and probeware, instructional models, games and simulations, assorted instructional aids (e.g., posters, maps, charts), and laboratory or field equipment.
- Virtual Resources including education materials available on the Internet such as World Wide Web pages, ftp sites, listserv archives, and frequently asked question (FAO) files.

### **ENC Resource Finder**

Resource Finder, an electronic catalog of K–12 curriculum resources, is designed for teachers who often have limited time and unlimited needs. With input from teachers on types of information they want to see in a catalog record, ENC developed a unique and comprehensive system. Each record has more than 20 fields, including standard library fields—title, author, subjects, publication date, and publisher—as well as fields unique to the needs of educators—grade level, table of contents, evaluation, and resource type.

Catalog entries provide detailed information about resources and enable ready access to materials that enhance classroom activities and support professional development. For example, Resource Finder includes extensive information on:

- Content—ENC's abstracts are detailed and comprehensive, with sufficient information about a resource to help teachers make informed decisions. The abstracts contain information about instructional methods, assessment, intended outcomes, and any special features, including appendices and bibliographies.
- ► Evaluation—A significant part of ENC's mission is to locate and include evaluative



information about the resources cataloged. Such evaluations include awards, field tests, and citations in journals and magazines. In addition, ENC collects evaluative data from teachers who use these materials in their classrooms. Teachers are invited to contribute their comments about resources through forms linked to the catalog record.

▶ Standards—To accommodate the growing emphasis on State and National standards for education, the ENC catalog contains information about linking certain materials to mathematics and science standards. When a resource meets particular standards, as indicated by the author or publisher, that information is detailed in the Standards field.

### **ENC** Online

By accessing ENC Online, users may readily obtain a variety of electronic resources, including the contents of this *Guidebook* and other ENC publications, the ENC Resource Finder, resources from other education databases, and information and materials on education reform. Anyone with a computer and a modem or Internet access may use ENC Online. (See directions for access on page ix.) The following are just a few of the features of ENC Online:

- ▶ Professional Development Exchange is a searchable database with descriptions of professional development activities and opportunities. Anyone who knows of a conference or workshop can enter relevant information into the Exchange. If the activity benefits math and science educators, it will be posted to the public database. Then all Online users can search, using criteria ranging from cost, to State, to activity type, and find activities that best meet their professional development needs. Grants available to educators will also be entered into the Exchange.
- ▶ Digital Dozen is a list of exemplary Internet sites chosen monthly. Links to other Web sites with lesson plans and activities are provided. Teachers will also find copies of the latest standards and curriculum frameworks as well as information for their own professional development. Also included are grant opportunities and articles from math and science education journals.
- ▶ Innovator of the Month is a section devoted to profiles of creative educators who are trying new techniques, taking risks, and finding success. In reading these monthly stories online, other educators will find the ideas and the support they need to attempt new challenges.

#### **ENC** on Disc

CD-ROMs contain thousands of text pages as well as sound, images, and digital video. ENC has created six CD-ROMs as another interactive way to access ENC materials including Resource Finder. The CD-ROM version duplicates the online catalog and can be browsed easily. In addition, the discs contain information on State curriculum frameworks, assessment methods, standards, equity issues, and professional development, as well as materials describing innovative practices in mathematics and science education. The discs also provide curriculum materials that teachers may use in the classroom. ENC distributes one free copy of each CD-ROM to U.S. public schools requesting one on school letterbead.

#### **ENC** in Print

In addition to this *Guidebook*, ENC produces publications for teachers and others interested in education. Publications available free from ENC include:

- ► ENC Focus, a mini-catalog that pulls together information about a select group of mathematics and science curriculum resources on various topics. Recent issues have featured equity in the classroom, integrating mathematics and science, data analysis, hands-on resources, calculatoractive materials, and others.
- ► ENC Update, a newsletter published three times per school year. Update features information about ENC and promising uses of technology in education.

### **ENC Reference Staff**

The ENC Reference Desk is staffed by professional reference librarians who answer questions concerning curriculum resources and can help educators make the best use of Clearinghouse resources. They can provide assistance with:

- ► Locating K-12 teaching resources for classroom use.
- ▶ Using the ENC Resource Finder.
- ► **Answering** other mathematics or science education-related questions.

In addition, ENC Online lets users give feedback or ask questions directly from the Web pages. For example, teachers can go to the ENC Virtual Reference Desk, submit a question, and mail it electronically to ENC librarians. Reference staff will respond within two working days.

## ENC Is Always Seeking Math and Science Materials

ENC counts on publishers, Federal agencies, professional organizations, and teachers to assist in the effort to provide broad access to information about curriculum materials. ENC's audience is anyone looking for science and curriculum materials, including:

- K-12 teachers looking for quality materials for their mathematics and science classrooms.
- Library and media specialists searching for mathematics and science materials for clients.
- School administrators and curriculum developers seeking materials that facilitate curriculum reform.
- K-12 students in mathematics and science.
- University faculty conducting research, developing new curricula, and educating preservice teachers.
- Parents and community members interested in mathematics and science resources.

Educators who know of valuable K-12 mathematics and science materials are invited to contact ENC's Acquisitions Coordinator and mention the items they would like to see in the collection. Please provide as much information as possible about the items. In addition, ENC actively seeks information available on the Internet, such as World Wide Web (WWW) sites where educational materials are stored. Educators who maintain such a site or know of one are requested to pass on the information to ENC.



## Additional Information About ENC

### **Accessing ENC Online**

#### Internet:

Using World Wide Web software, connect to ENC at http://www.enc.org. With an Internet connection, use the telnet command to connect to enc.org and login as guest.

#### Modem:

With a modem, dial (800) 362-4448 for toll-free access. For direct access, dial (614) 292-9040

Set communication software to: VT100 terminal emulation. No parity, 8 data bits, 1 stop bit. Once connected, press RETURN or ENTER once to bring up a screen and type c to begin. Login as guest.

#### **General Information**

Toll-Free Telephone: (800) 621-5785 Direct Telephone: (614) 292-7784

E-mail: info@enc.org Fax: (614) 292-2066

Hours: Monday-Friday: 8 a.m.-5 p.m./ET

### **Technical Help Desk**

Toll-Free Telephone: (800) 621-5785 Direct Telephone: (614) 292-9590

E-mail: help@enc.org

Hours: Call the toll-free number for hours when the Technical Help Desk is staffed.

### Reference Desk

Toll-Free Telephone: (800) 621-5785 Direct Telephone: (614) 292-9734

E-mail: library@enc.org

Hours: Call the toll-free number for hours when the Reference Desk is staffed.

### **Acquisitions**

Toll-Free Telephone: (800) 621-5785 Direct Telephone: (614) 292-8389

E-mail: submit@enc.org

### **Mailing Address**

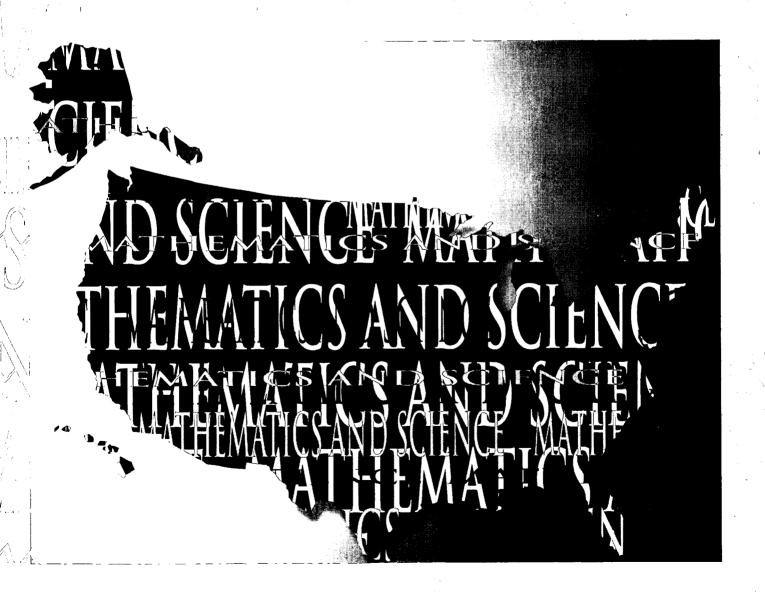
Eisenhower National Clearinghouse for Mathematics and Science Education The Ohio State University 1929 Kenny Road Columbus, OH 43210-1079

#### **ENC Demonstration Sites**

In collaboration with the Eisenhower Regional Consortia, ENC has established regional Demonstration Sites that provide educators across the Nation a place for hands-on access to ENC online resources. For information about the Consortia, refer to the preface for each region in Section Two of this *Guidebook*.



## **Overviews of Federal Agencies**





## U.S. Department of Agriculture (USDA)

To compete effectively in the increasingly complex world of international agribusiness and agri-science, America needs professionals who are highly skilled in the food and agricultural sciences. USDA is committed to developing human resources by strengthening its sponsorship of science and mathematics programs at all levels of learning.

Dan Glickman, Secretary
U.S. Department of Agriculture



### **Mission**

The U.S. Department of Agriculture (USDA) is authorized to provide the leadership, oversight, and management necessary to ensure that the United States has adequate supplies of high-quality food and fiber. The Department supports and conducts a wide range of research, development, extension, and education activities to achieve that mission.

### **Background**

On May 15, 1862, President Abraham Lincoln signed the act creating the U.S. Department of Agriculture. The Department has since helped make American agriculture the most productive in the world, giving the American people the most varied and wholesome food supply for the smallest share of disposable income of any people in the world. On July 2, 1862, President Lincoln signed the Morrill Land-Grant College Act, which established colleges in each State to educate young men and women in agriculture. This Act brought higher education within reach of youth of ordinary means and elevated what had been called "agricultural training" to a scientific enterprise. In 1890, an additional group of 17 Historically Black Colleges and Universities was given landgrant status to enable the Department to serve all populations. The Food and Agriculture Act of 1977 designated USDA as the lead Federal Agency for higher education in the food and agricultural sciences.

## Role in Mathematics and Science Education

USDA's education efforts have helped produce scientific and nonscientific professionals who have made American agriculture the most effective and efficient agricultural system in the world. The Department has accomplished the transfer of new technologies and scientific knowledge via research agencies, such as the Cooperative State Research, Education, and Extension Service; the Agricultural Research Service; and the Forest Service. USDA is also home to the National Agricultural Library, the largest

agricultural library in the world. Other USDA agencies with research and education programs include the Animal and Plant Health Inspection Service, the Agricultural Marketing Service, the Food and Consumer Service, the Foreign Agriculture Service, the Natural Resources Conservation Service, and the National Agricultural Statistics Service.

### Elementary and Secondary Education

USDA precollege activities devoted exclusively to mathematics and science are few. However, its Ag in the Classroom Program provides National coordination for States, helping to increase K-12 students' awareness of agriculture's role in the economy and society. USDA's Research Apprenticeship Program annually supports approximately 200 high school students' (primarily minority and female youth) hands-on research experience with scientists in Federal and university laboratories. Scientific literacy among K-12 students is sustained by support from the many 4-H Youth Development Programs. Teacher enhancement is an integral part of these programs.

### **Higher Education**

Because of the need to ensure an adequate supply of trained scientists and professionals in the food and agricultural sciences, USDA was designated as the lead Federal agency for higher education in these fields. Program areas include agriculture, natural resources and forestry, veterinary medicine, family and consumer sciences, and related disciplines. In response to its congressional mandate, USDA established the Office of Higher Education Programs, which provides National leadership to:

- Achieve and maintain excellence in college and university programs in the food and agricultural sciences.
- Produce outstanding graduates to satisfy the Nation's requirements for scientific and professional expertise.
- ► Enhance the synergism of research and teaching.

In this respect, USDA supports the development of expertise through both predoctoral traineeships at universities and postdoctoral traineeships in Federal laboratories as mechanisms to train personnel for critical positions with government, academia, and the private sector.

USDA's role in undergraduate education is even more extensive. The Office of Higher Education Programs (HEP) functions primarily as a catalyst to promote excellence in education, working closely with the States, the college and university systems, and the private sector. HEP administers several highpriority programs to enhance the quality of education and to develop outstanding scientific and professional expertise at colleges and universities across the Nation. For example, minority expertise development is funded through the Multicultural Scholars Program, launched in 1994. Institutional enhancement occurs through six grants programs, three formula (Delta Teachers Academy, Tribal Colleges Endowment Fund, and Tribal Colleges Education Equity Grants Program) and three competitive (1890 Institution Capacity Program, Higher Education Challenge Grants Program, and Hispanic-Serving Institutions Grants Program), amounting in fiscal year 1997 to approximately \$24 million. Other National projects enhance the development of issues and information and the development of strategic planning.

### **Public Understanding of Science**

USDA fosters public understanding of science through a variety of programs, including an annual Food Safety Campaign, held to coincide with National Consumers Week. Also provided are a Nutrition Education and Training Program and a USDA Meat and Poultry Hotline. In addition, approximately 100 Federal laboratories of the Agricultural Research Service provide tours and openhouse activities to educate the general public on new developments in agricultural research.



BEST COPY AVAILABLE

## How Mathematics and Science Education Programs Are Administered

The Under Secretary for Research, Education, and Extension has overall authority for educational initiatives within USDA. Most agencies referenced in this section are under the Under Secretary's direct purview. The Office of Higher Education Programs of the Cooperative State Research, Education, and Extension Service is the operating division most involved with college and university science education. The National Agricultural Research, Extension, Education, and Economics Advisory Board, established by Congress in 1996, advises the Secretary and land-grant colleges and universities on long-term and short-term National policies and priorities relating to the Department's research, education, and economics mission. The Board is made up of members from food and agricultural science organizations, societies, associations, and institutions representing a wide range of interest groups. USDA offers an unparalleled National network for advancing science and education through its Federal laboratories, State Agricultural Experiment Station System, university scientists and educator cooperators, professional staff, and volunteer lay leaders.

### Administrative Offices for Mathematics and Science Education

### **Agricultural Research Service**

This service operates approximately 100 Federal laboratories and research centers nationwide and overseas. Scientists at these laboratories are valuable resources for science-enrichment initiatives at the precollege and college levels.

Administrator, Agricultural Research Service U.S. Department of Agriculture Room 302-A, Whitten Building 1400 Independence Avenue SW Washington, DC 20250-0301 (202) 720-3656 / Fax: (202) 720-5427 E-mail: actadm@ars.usda.gov

### Cooperative State Research, Education, and Extension Service (CSREES)

CSREES advances science and technology in support of agriculture, forestry, people, and communities in partnership with the State Agricultural Experiment Station System and the State Cooperative Extension System. CSREES also serves as the Federal partner in the Cooperative Extension System, a unique

educational partnership with land-grant institutions in each State, territory, and the District of Columbia. The partnership includes more than 130 colleges of agriculture; 59 agricultural experiment stations; 57 cooperative extension services; 63 schools of forestry; Tuskegee University and the other 16 Historically Black Colleges and Universities as designated in 1890; 27 colleges of veterinary medicine; 42 schools and colleges of family and consumer sciences; 29 Native American land-grant institutions, as designated in 1994; more than 160 Hispanic-serving institutions, including some 80 members and 45 associate members of the Hispanic Association of Colleges and Universities. The Cooperative Extension System is a valuable resource for technology transfer and issue identification at all education levels. CSREES administers the 4-H Program, which is one of the largest informal youth development programs in the country. The local county Cooperative Extension Service office can be contacted for more information about education programs. Offices are listed under local government in the telephone directory.

Dr. B. H. Robinson, Administrator Cooperative State Research, Education, and Extension Service U.S. Department of Agriculture Room 305-A, Whitten Building 1400 Independence Avenue SW Washington, DC 20250-2201 (202) 720-4423 / Fax: (202) 720-8987 E-mail: CSREES@reeusda.gov

### **Forest Service**

The Forest Service expanded its involvement in conservation education in 1990 by launching the Natural Resource Conservation Education Program (NRCEP), which was developed to help implement the Environmental Education Act of 1990. The program was established service-wide to strengthen natural resources education efforts. It is jointly sponsored by the Forest Service and the National Association of State Foresters. Its primary objective is to support a lifelong learning process that promotes the understanding of natural resources and ecosystems—their interrelationships, conservation, use, management, and values to society. NRCEP works with partners to jointly sponsor conservation education projects throughout the Nation. These joint projects combine Federal, State, local, and private funds to increase the money available for conservation education programs. Some of the current National NRCEP projects include: Project Learning Tree, National Children's Forests, Investigating Your Environment, Girl Scouts of the USA, and Boy Scouts of America. The NRCEP office can be contacted for more information about education programs.

Natural Resource Conservation Education Program Forest Service U.S. Department of Agriculture 1400 Independence Avenue SW PO Box 96090 Washington, DC 20090-6090 (202) 205-1545

### **National Agricultural Library**

The National Agriculture Library administers library services and programs and is the largest agricultural library in the world.

Pamela Andre, Director National Agriculture Library U.S. Department of Agriculture 10301 Baltimore Boulevard, Room 200 Beltsville, MD 20705-2351 (301) 504-5248 / Fax: (301) 504-5472 E-mail: info@nalusda.gov

## Office of Civil Rights Enforcement (OCRE)

OCRE develops and enforces USDA's civil rights principles, policies, standards, and regulations. OCRE ensures compliance with government-wide regulations governing civil rights management.

Director, Office of Civil Rights Enforcement U.S. Department of Agriculture Room 1322, South Building 1400 Independence Avenue SW Washington, DC 20250-1322 (202) 720-5212 / Fax: (202) 205-2891

### Office of Public Affairs

This office provides general information on USDA programs.

Director, Office of Public Affairs U.S. Department of Agriculture Whitten Building. Room 402-A 14th Street and Independence Avenue SW Washington, DC 20250-1301 (202) 720-4623 / Fax: (202) 720-5043



### National Programs for K-12 Education

### 4-H/Honda Mentorship Project

This project provides an opportunity for teams of teenagers to work with adult mentors in hands-on problem-solving experiences in engineering at Honda's technical training sites across the country. The curriculum includes working as a team and managing time and resources to solve science-related problems.

Director, National 4-H Council 7100 Connecticut Avenue NW Chevy Chase, MD 20815 (301) 961-2853

### 4-H Missions in Space Program

This partnership between National 4-H and the Alabama Space Science Exhibit Commission encourages youth to attend the Space and Rocket Center in Alabama and the Astronaut Hall of Fame in Florida. Space Camp allows students to participate in a variety of science and technology activities. Scholarships are available to assist underrepresented youth.

Extension 4-H Specialist, ACES-4-H 211 Duncan Hall Auburn University, AL 36849-5620 (205) 844-2233

### 4-H Regional Leadership Centers

Designed to complement the National Network for Action in Science and Technology, Regional Leadership Centers train community-based teams in informal science education and are responsible for keeping these teams up to date on new programs. Regional Centers are currently operating in California, Georgia, Missouri, and New York.

Coordinator, National Network for Action and Science Technology 6H Berkey Hall Michigan State University East Lansing, MI 48824-1111 (517) 355-0180

4-H Specialist, Agriculture and Natural Resources University of California at Davis 300 Lakeside Drive Davis, CA 95616 (916) 752-8824

### 4-H Science Experience and **Resources for Education Settings** (SERIES) Program

The National 4-H SERIES Program increases both the quantity and quality of science experiences available to students in a way that

promotes a greater understanding of science. SERIES trains teenagers as science coaches for youth ages 9-12. Teens also work under the mentorship of practicing scientists, explore possible career opportunities in science and technical fields, and participate in community service. Training for SERIES is conducted through the four Regional Leadership Centers.

Project Director, 4-H SERIES Division of Agriculture and Natural Resources University of California at Davis 300 Lakeside Drive Davis, CA 95616 (916) 752-8824

### 4-H Youth Development Programs

Under the Cooperative State Research. Education, and Extension Service, these programs spark interest in mathematics and science among American youth. The purpose of the programs is to complement classroom education with informal, experiential education in community settings. Approximately six million youth, ages 5-18, participate in school enrichment programs, clubs, and special events. The 4-H organization receives substantial support from volunteers and private-sector contributors. Each State has a 4-H State Leader who can provide more information about 4-H activities.

National Program Leader Families, 4-H, and Nutrition USDA Cooperative State Research, Education, and Extension Service Room 3860, South Building Washington, DC 20250-0900 (202) 720-5516 / Fax: (202) 720-9366

### Ag in the Classroom

This program helps students gain a greater understanding of agriculture's role in the economy and society, and informs students about career opportunities in food and agricultural sciences. While the Department of Agriculture provides National leadership, each State develops its own programs in cooperation with agribusiness, education, and government. Information about State programs is available through the Washington, DC office. The Ag in the Classroom State Leader can provide details on State-level programs and materials.

Director, Ag in the Classroom U.S. Department of Agriculture Room 4309, South Building Washington, DC 20250-0991 (202) 720-5727 / Fax: (202) 690-0062 E-mail: ewolanyk@reeusda.gov

### **Black Emphasis Program**

This program develops academies that focus on African-American males at the middle school level. The academies provide students with early science experiences, mentors, and role models to enhance self-confidence and to develop an interest and desire to achieve in science-related fields. Academies are funded through two Historically Black Colleges and Universities.

Black Emphasis Program Manager U.S. Department of Agriculture Room 1322, South Building 1400 Independence Avenue SW Washington, DC 20250-1322 (202) 720-2019 / Fax: (202) 690-2345

### Infusing Aquaculture into Agriculture Education

Through congressional appropriations in 1990-1995. USDA initiated a pilot program, Infusing Aquaculture into Agriculture Education, to develop materials, conduct field tests, and provide training in aquaculture for selected teachers across the country. The 1,100-page, five-volume curriculum is proving valuable in teaching high school students the principles of science and mathematics related to aquatic organisms. The program is being adapted by some schools for middle school and elementary students.

Director, Higher Education Programs Cooperative State Research, Education, and Extension Service U.S. Department of Agriculture Ag Box 2251 14th and Independence Avenue SW Washington, DC 20250-2251 (202) 720-1973 / Fax: (202) 720-2030

### National Network for Action in Science and Technology

The National Network creates a stronger link of land-grant colleges and universities that provides technical assistance to the Federallyfunded sites for at-risk children, youth, and families. The Network provides trainers with the information and skills necessary to return to their local communities and train others to implement science and technology curricula and processes. In addition, trainers learn how to recruit participants, promote programs, and establish advisory and planning groups.

Coordinator, National Network for Action and Science Technology 6H Berkev Hall Michigan State University East Lansing, MI 48824-1111 (517) 355-0180



### Research Apprenticeship Program

This program provides summer employment in university and Federal research laboratories for high school students who exhibit strong mathematics and science aptitude. One-fourth of the students receive Federal support; the remainder are supported by State and private funds leveraged by the Federal partner. Many research apprentices are females or minorities. Participants interact directly with scientists at USDA laboratories and gain valuable experience in agricultural science.

Rosanna Taylor, Manager U.S. Department of Agriculture Office of the Administrator, Special Programs Room 3552-S 1400 Independence Avenue SW Washington, DC 20250-0301 (202) 720-3511

## Research Apprenticeship Program for Minority High School Students

This program provides summer employment for minority high school students with strong scientific aptitude. Participants also have the opportunity to interact with research scientists and gain firsthand experience in a research environment at selected university laboratories.

Coordinator, 1890 Programs
U.S. Department of Agriculture
Cooperative State Research, Education, and
Extension Service
Ag Box 2209
Washington, DC 20250-2209
(202) 720-3511 / Fax: (202) 720-3398
E-mail: mmayes@reeusda.gov

## SPACES: Preparing Kids for a High-Tech and Global Future

SPACES is an informal, community-based science education program that uses hands-on techniques to prepare students for the global, high-tech society of the future. This programming framework shows how to set up a science education program for children ages 5–14 and how to involve community scientists, technicians, and others with science and technology expertise. The program focuses on aerospace, the environment, and relationships. Extensive curriculum support is available.

Michigan 4-H Youth Programs Michigan State University 6H Berkey Hall East Lansing, MI 48824-1111 (517) 355-0180 / Fax: (517) 355-6748 E-mail: olsenj@msue.msu.edu

## Teachers' Research Fellowship Program

This program offers temporary employment to mathematics, biology, or physical science teachers at the junior or senior high school level. Teachers work under an Agricultural Research Service scientist on specific research problems tailored for completion within a set time period. The program provides teachers with firsthand agricultural and food-related research experience that can be transferred to the classroom.

Rosanna Taylor, Manager U.S. Department of Agriculture Office of the Administrator, Special Programs Room 3552-S 1400 Independence Avenue SW Washington, DC 20250-0301 (202) 720-3511

### **Youth Conservation Corps**

This summer employment program is offered by the Departments of Agriculture and the Interior. Students ages 15–18 work on projects to further the development and conservation of U.S. natural resources. Work projects are planned, directed, and executed to give the enrollees an understanding of their tasks and of how their work contributes to environmental enhancement.

Director, Human Resources Programs U.S. Department of Agriculture Forest Service PO Box 96090 Washington, DC 22209 (703) 235-8834



### **U.S. Department of Commerce (DOC)**

In this time of unparalleled and unprecedented economic integration, students must think of themselves not only as citizens of the United States, but as active participants in a global marketplace. Our broad goals for the 21st century must continue to address the rapidly changing nature of the American economy and empower our students and workers with the opportunities to move into this global marketplace with confidence and a sense of pride.

William S. Daley, Secretary U.S. Department of Commerce



### **Mission**

The U.S. Department of Commerce (DOC) encourages, serves, and promotes the Nation's international trade, economic growth, and technological advancement. Within this framework, and with a policy of promoting the National interest through the encouragement of a competitive free enterprise system, the Department provides a wide variety of programs.

### **Background**

The Department was established by Congress in 1913 through a reorganization of the Department of Commerce and Labor, which had been created in 1903. Today, DOC has 13 agencies in areas such as international trade, technology, the oceans and the atmosphere, economic and social data, travel and tourism, patents and trademarks, and telecommunication.

## Role in Mathematics and Science Education

The National Institute of Standards and Technology and the National Oceanic and Atmospheric Administration have missions that involve scientific research and technical applications, and, therefore, have the greatest role in science and mathematics education within DOC.

### **Elementary and Secondary**

Most DOC precollege activities consist of voluntary outreach by the professional staff or cooperative efforts with other organizations, with minimal direct funding available.

#### **Higher Education**

DOC has developed a cooperative education program to provide work-related educational opportunities to students, as well as graduate and postdoctoral fellowships.

## How Mathematics and Science Education Programs Are Administered

DOC agencies that offer education programs self-administer their respective programs.

### Administrative Offices for Mathematics and Science Education

### National Institute of Standards and Technology, Office of International and Academic Affairs / Postdoctoral Programs

As the National laboratory for measurement science and engineering, with emphasis on state-of-the-art research, the National Institute of Standards and Technology maintains a strong program of postdoctoral education. The Institute sponsors numerous postdoctoral research fellowships in collaboration with the National Research Council of the National Academy of Sciences.

Dr. Jack Hsia / Joy Brooks, Academic Affairs Room A505, Administration National Institute of Standards and Technology Gaithersburg, MD 20899 (301) 975-3071 / Fax: (301) 975-3530 E-mail: v.brooks@nist.gov

Kimberly J. Goode, Student Coordinator National Institute of Standards and Technology Office of Personnel and Civil Rights Administration Building, Room A123 Gaithersburg, MD 20899 (301) 975-3026

## The National Oceanic and Atmospheric Administration (NOAA)

### National Sea Grant Program-NOAA

NOAA's National Sea Grant Program, in conjunction with 29 universities and institutions, promotes a strong educational base through a

network of more than 300 university and marine research institutions. Sea Grant reaches its audiences through workshops, conferences, brochures, videotapes, films, radio shows, newsletters, and local educational programs. For more information about a nearby Sea Grant institution, contact the National Sea Grant Office.

National Sea Grant College Program National Oceanic & Atmospheric Administration 1315 East-West Highway Silver Spring, MD 20910 (301) 713-2431 / Fax: (301) 713-0799

### **National Weather Service-NOAA**

The National Weather Service supports educational programs developed by a wide variety of outside organizations. Examples are the American Meteorological Society's Project Atmosphere, the Weather Channel's Weather Classroom, and the NBC/WRC-TV project to develop public access to earth and space science data visualizations via TV and the Internet. Project Atmosphere prepares teachers to be Atmospheric Education Resource Agents so that they can act as a bridge between meteorologists and teachers in the classroom. The Weather Classroom, which is on the air ten minutes each day Monday through Friday, has a companion textbook. A series of publications on severe weather are being distributed to schools and the public to increase awareness and use of the National Weather Radio Service.

Joan VonAhn NOAA National Weather Service Services Development Branch 1325 East-West Highway Silver Spring, MD 20910 (301) 713-0462

## NOAA Office of Public and Constituent Affairs

This office has a limited number of publications suitable for classroom instruction that teachers can request by mail. Some of these titles are also available on the Internet. Users can access information online by typing "Telnet gopher.esdim.noaa.gov" at the Internet prompt, logging in as "gopher" and selecting "Connection to NOAA's Online



**BEST COPY AVAILABLE** 

Data," and then selecting "Answers from NOAA: Educational Resources (Public Affairs)." This information can also be found at http://www.noaa.gov/public-affairs/ at "Answers from NOAA."

NOAA Public and Constituent Affairs Office 14th & Constitution Avenue NW Room 6013

Washington, DC 20230 E-mail: opca@esdim.noaa.gov WWW: http://www.noaa.gov

## Office of Ocean and Coastal Resource Management (OCRM)-NOAA

The National Marine Sanctuary Program and National Estuarine Research Reserve System are two programs within OCRM, which fulfill the office's mission of achieving sustainable use of our Nation's coastal and ocean resources as well as maintenance of marine and coastal biodiversity in special areas through long-term comprehensive management and protection. Both programs offer education programs that interpret ongoing site-specific research as well as promote public awareness, understanding, appreciation, and wise use of coastal and marine environments. Site programs are as varied as the coastal resources and range from hands-on studies of the coastal ecology and geology for high school students to community workshops for specific resource users.

Joyce Atkinson, National Education Coordinator NOAA/OCRM 1305 East-West Highway SSMC4, 12th Floor Silver Spring, MD 20910 (301) 713-3145 ext. 146 Fax: (301) 713-0404

E-mail: jatkinson@ocean.nos.noaa.gov

## National Programs for K-12 Education

### National Sea Grant College Program

Established in 1966 and administered by NOAA, this program combines the resources of the Federal government with those at universities and States to develop and analyze the Nation's marine resources through research, education, and outreach. Grant proposals are reviewed and grants are normally awarded on an institutional basis through the Sea Grant college or institution designated in each coastal State. The Sea Grant colleges provide research opportunities for scientists and education for the general public about marine resources. Educational activities

include graduate education and research apprenticeships, undergraduate education, K-12 teacher science skills, and public outreach.

National Sea Grant College Program National Oceanic & Atmospheric Administration 1315 East-West Highway Silver Spring, MD 20910 (301) 713-2431 / Fax: (301) 713-0799

### National Sea Grant College Program

Global Change Education Program consists of "Training the Trainer" workshops for informal educators, NOAA employees, and local extension leaders. Workshop topics include natural variability, greenhouse/sea level rise, ozone depletion, resource consumption, and decision making under "scientific uncertainty."

The Operation Pathfinder Program consists of two-week summer courses that present an introduction to oceanographic and coastal processes. Courses are available in six regions and are designed to enhance skills in science teaching.

Dr. Shirley Fiske, Outreach Program Director R/OR1, 1335 East-West Highway Silver Spring, MD 20910 (301) 713-2431 ext. 148 Fax: (301) 713-0799

E-mail: Shirley.Fiske@noaa.gov

## NOAA National Environmental Satellite, Data, and Information Service (NESDIS)

The primary educational goal of NESDIS is to enable teachers to access and interpret satellite imagery for use in teaching the Earth sciences. Data can be accessed either by direct readout from orbiting satellites or via the Internet service called the Satellite Active Archive (SAA). Imagery can be browsed, and then downloaded in limited quantities. A new initiative of the SAA is the creation of learning modules on satellites, remote sensing, and applications of satellite data, including imagery interpretation. NESDIS also provides information on ordering archived satellite data. Scientists in NESDIS help teachers learn how to interpret satellite imagery for applications in the atmospheric, marine, and terrestrial sciences. They give presentations at teacher conferences, conduct courses for groups of teachers near NESDIS facilities, and even give individual advice when possible.

Nina Jackson, NESDIS Diversity and Education Outreach Coordinator NOAA/NESDIS Room 2057, FB4 Suitland, MD 20746 (301) 457-5112 / Fax: (301) 457-5276

## NOAA National Weather Service (NWS)

The primary mission of the NWS is the protection of life and property and the enhancement of the National economy. To fulfill this mission, the NWS issues forecasts and warnings to minimize the impact of severe weather on the public and on commercial enterprises. The NWS produces a number of informative materials designed to prepare the public for severe weather conditions. Publications prepared in cooperation with the American Red Cross highlight the science and safety aspects of severe weather such as hurricanes, tornadoes, thunderstorms, flash floods, and winter storms. In partnership with the American Meteorology Society, the NWS has developed a program to educate teachers in the sciences of meteorology and hydrology. This program, Project Atmosphere, provides two-week summer workshops for teachers at several NWS training and research locations. At each field office, the NWS has designated a Warning Coordination Meteorologist and a Science Operations Officer to interact with local community members, including the general public, emergency managers, educators, and the media.

Joan VonAhn NOAA National Weather Service Customer Service Core 1325 East-West Highway Silver Spring, MD 20910 (301) 713-0090



### **U.S. Department of Defense (DoD)**

Nearly 2,000 years ago, the Greek philosopher Epictetus said, "Only the educated are free." His wisdom applies to nations as well as to individuals. At the Department of Defense, we base our strong commitment to quality education on the realities of life. Without well-educated Americans we cannot have a well-educated military force and without such a force we cannot hope to successfully defend our Nation against those who seek to diminish us, and our freedom. Mathematics and science skills are, therefore, vital building blocks of our democracy, and work to the benefit of all Americans.

William S. Cohen, Secretary U.S. Department of Defense



### **Mission**

The mission of the U.S. Department of Defense (DoD) is to provide for National security.

### **Background**

The Department of Defense makes a major investment in education and training. The Department has a vital interest in the ability of our Nation to produce highly trained scientists and engineers. During the past 50 years, the Military Services and Defense Agencies have developed wide-ranging programs that support science and engineering education. The programs evolved independently as each DoD component sought to increase the numbers and to improve the quality of scientists and engineers available to meet their needs.

In traditional educational settings, the Department of Defense provides education for grades K-12 for more than 120,000 dependents in overseas locations through the Department of Defense Dependents Schools System and in U.S. locations where the local civilian schools cannot meet the needs of the dependent population. The DoD service academies, with a total enrollment of 11,800, graduated approximately 2,900 officers in 1995. Additionally, more than 881,000 current and former enlisted members of the armed services have applied for Montgomery GI Bill benefits since the Bill's enactment in 1985. These benefits provide subsidies to assist in completing college educations.

## Role in Mathematics and Science Education

Maintaining technological leadership is critical to both National defense strategy and economic well-being. The United States has consistently sought to develop and deploy superior weapon systems to project an imposing military presence that deters foreign aggression. Furthermore, in today's global marketplace, countries will be able to enjoy continued economic prosperity only if they are able to effectively exploit and adapt to emerging technologies.

To carry out these strategies, the United States must have a supply of scientists and engineers that meets the National need. For DoD, demand for scientists and engineers includes those for civilian employees of the Department, military personnel, and defense contractor employees. DoD sponsors a wide range of educational programs to improve the quality of the pool of personnel from which scientists and engineers can be drawn and in this way to help ensure that science and engineering requirements are satisfied.

The Department directly employs more than 100,000 scientists and engineers, approximately 3 percent of the National pool. Of this number, approximately 25,000 are engaged in research and development in the Department's laboratories and centers.

More than 200 separate programs use a wide variety of approaches and methods to enhance science and engineering education at different educational levels. At the upper level, college and university professors guide advanced research and development efforts for specific DoD projects. Lower level programs include sponsorship of elementary and secondary school science fairs, provision of tutoring and mentorship for students, and demonstrations and laboratory tours that stimulate interest in science and engineering. Many programs award scholarships, assistantships, and fellowships.

### Elementary and Secondary Education

Precollege programs range from short exposure tours, seminars, and science fairs to intensive tutoring and summer experience programs. The most effective programs are those, such as the High School Apprenticeship Programs, that encourage an interest in and cultivate enthusiasm for science and engineering careers and provide the necessary guidance.

### **Higher Education**

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DoD support in the areas of science and engineering education includes undergraduate Reserve Officer Training Corps scholarships, graduate fellowships, National defense-related research conducted by graduate students, and programs designed to enhance recruitment

and retention of civilian employees in science and engineering career fields.

Effective recruiting programs include career intern programs, which recruit students from college campuses for an accelerated promotion track and advanced education opportunities. The Co-op Program provides students with early exposure to the work environment and helps foster understanding of Federal job opportunities among students and college personnel. Postdoctoral research associateships provide a continuing supply of well-qualified graduate scientists and engineers for conducting research in DoD laboratories or in universities through grants and contracts.

DoD's Research Office provides opportunities for graduate students to work with university faculty members and explore topics of interest to the Department. Fellowship opportunities are also provided through DoD laboratories, which may, upon degree completion, provide the recipient with employment opportunities.

## How Mathematics and Science Education Programs Are Administered

In 1991 the Department of Defense Authorization Act directed the Secretary of Defense to designate an individual within its Office to act as an adviser on science, mathematics, and engineering education. As such, the Director of Defense Research and Engineering (DDR&E) has been identified as the individual responsible for implementing scientific, mathematics, and engineering educational improvement programs within DoD.

The structure for managing science and engineering educational activities within DoD consists of three elements. The DDR&E provides leadership. A Science and Engineering Education Panel (SEEP) serves as a review and advisory body to provide continuous oversight of and coordination among the military departments and defense agencies. Lab directors, program directors, and other managers within DoD components execute science and engineering education activities within their organizations.



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DoD components exercise a great deal of discretion in conducting science and engineering programs. The DDR&E does not focus on execution, but instead delegates authority for operation of the programs to the organizational level. The DDR&E serves as an interface with other Federal departments and agencies and, through SEEP, provides guidance and controls.

## Administrative Offices for Mathematics and Science Education

## Office of the Deputy Director, Defense Research and Engineering

The Office of the Deputy Director, Defense Research and Engineering oversees research at DoD facilities and advises on DoD educational programs.

Keith Thompson OSD/ODDR&E Pentagon, Room 3E1045 Washington, DC 20301 (703) 325-1653

## National Programs for K-12 Education

### High School Science and Mathematics Summer Faculty (HSSMF) Program

The HSSMF Program is part of the Scientific Service Program (SSP) contract awarded to and administered by Battelle. The program is sponsored by the Department of the Army through the U.S. Army Research Office (ARO) and by participating Army laboratories and centers. Its primary objective is to enable participating high school faculty to use their personal exposure to research and development activities at Army laboratories/centers to enhance their research and teaching skills and to encourage high school students to undertake careers in science and mathematics.

Applicants must be U.S. citizens and faculty members of accredited high schools or accredited secondary schools from the seventh through the twelfth grades. They must teach one or more of the following disciplines: mathematics, physics, general science, engineering, chemistry, psychology, computer science, and biology. Awards are made to the most deserving applicants. Selected candidates receive a stipend of \$600 per week for a maximum of 10 weeks during the summer.

Candidates must live within commuting distance of the assigned laboratory or center.

Gary Hill Battelle, Research Triangle Park Office 200 Park Drive, PO Box 12297 Research Triangle Park, NC 27709-2297 (919) 549-8291 / DSN: 832-4264 Fax: (919) 549-8205

## Junior Science and Humanities Symposium (JSHS) Program

JSHS Program objectives are to:

- Promote research and experimentation in the sciences, mathematics, and engineering at the high school level.
- Recognize the significance of research in human affairs and the importance of humane and ethical principles in the application of research results.
- Search out talented youth and their teachers, recognize their accomplishments at symposia, and encourage their continued interest and participation in the sciences, mathematics, and engineering.
- Expand the horizons of research-oriented students by exposing them to opportunities in the academic, industrial, and governmental communities.
- Increase the number of future adults capable of conducting research and development.

A typical symposium is held in an academic setting where attendees benefit from an active exchange of ideas with professionals and with their peers. They hear lectures from distinguished scientists and observe ongoing research projects in university, Army, or corporate laboratory settings. Selected students also have the opportunity to present the results of their original research before the audience. More than 8,000 students and teachers participate annually in 47 regional symposia held throughout the United States, Europe, Japan, and Puerto Rico.

Peggy Lacewell U.S. Army Research Office 4300 South Miami Boulevard PO Box 12211 Research Triangle Park, NC 27709-2211 (919) 549-4339 / DSN: 832-4339

### National Science Center (NSC)

The NSC and its multifaceted programs are supported by the United States Army. Programs are designed to increase interest in science, mathematics, and technology among students; to improve skills of teachers; and to provide mathematics and science education support in the classroom. The Center pro-

vides hands-on workshops for teachers in science, mathematics, electronics, and computers; it also offers camps nationwide in the same subjects for students. Portable planetariums for instruction in space science, astronomy, geography, and biology are available on loan to teachers who have been certified through the Center's comprehensive training program. In addition, SNC operates a discovery center that offers interactive experiences with scientific exhibits to school groups and the general public. Mobile versions of the discovery center travel nationwide. NSC also reaches out Nationally with satellite teleconference programs on science education and with a Science-by-Mail program that encourages pen pal relationships between students and scientists.

National Science Center Attention: ATZH-NSC-D Building 25722 Fort Gordon, GA 30905-5689 (706) 791-7621

### **Naval Science Awards Program**

The Navy and Marine Corps participate each year in district, regional, and State science and engineering fairs that exhibit various projects submitted by students in grades 9-12. At each participating fair, four students whose projects are considered to demonstrate excellence in any field of endeavor, not necessarily military or nautical, are designated as first-place Navy/Marine Corps Distinguished Achievement Award Winners. The students receive a certificate, a programmable scientific calculator, and an invitation to submit a written report of their winning project to the National Naval Science Award Program Competition held in May. Approximately 25 winners of this competition are awarded scholarships and science-oriented trips. The Navy and Marine Corps also participate in the annual International Science and Engineering Fair (ISEF), sponsored by Science Service, Inc., and award scholarships in each of the scientific disciplines. Award recipients must be citizens of the United States or its territories at the time of their selection.

Project Officer Naval Science Awards Program Office of Naval Research Code 353 800 North Quincy Street Arlington, VA 22217-5660 (703) 696-5787 / Fax: (800) 422-6727

## Navy Community Service Program (NCSP)

The NCSP is a worldwide program that encourages Navy military and civilian employees to volunteer their time and talent to help educate and encourage youth to develop social responsibility, fitness, and nat-



ural resource stewardship. The Navy currently participates in several hundred volunteer partnerships with schools. These arrangements provide tutoring, mentoring, and other community-based projects. Projects are geared toward, but not limited to, strengthening student skills in mathematics, science, engineering, and environmental conservation. See the State Highlights section of this publication for regional NCSP offices.

Navy Community Service Program Bureau of Naval Military Personnel Pers-605 2 Navy Annex, Room 1809 Washington, DC 20370-6050 (703) 614-1290

## Research and Engineering Apprenticeship Program (REAP)

REAP was initiated in 1980 to encourage socially and economically disadvantaged youth to pursue studies in science and engineering. The REAP experience provides a cooperative education (work/study) program that affords hands-on experience in Army research and development activities to high school students who may choose to enter and complete basic education in science and engineering. High school students are accepted for apprenticeships at universities under mentorship of a university faculty member. The students are paid during work periods ranging from four to 13 weeks and work directly under a mentor scientist or engineer who provides guidance on day-to-day job activities and information on career opportunities in science and engineering.

Peggy Lacewell U.S. Army Research Office 4300 South Miami Boulevard PO Box 12211 Research Triangle Park, NC 27709-2211 (919) 549-4339 / DSN: 832-4339

## Science and Engineering Apprentice Program (SEAP)

This program, coordinated and administered by The George Washington University (GWU), places academically talented high school students with interest and ability in science and mathematics as apprentices in more than 40 DoD research activities for eight weeks during the summer. These students work with scientists and engineers who act as mentors. Participating laboratories are encouraged to give special consideration to females and to members of underrepresented minority groups. Specific minority programs are held on the GWU campus in the summer. See the State Highlights section of this publication for participating activities.

Marylin Krupsaw GWU/SEAS Science and Engineering Apprentice Program 707 22nd Street NW Washington, DC 20052 (202) 994-2234

### **Undergraduate Training Program**

Developed particularly for minority high school students, this program provides full tuition to any university or college for outstanding students who plan to major in electrical or computer engineering, computer science, mathematics, or selected languages. Recipients are guaranteed summer employment during school and permanent employment within the National Security Agency upon graduation. Program participants are required to work for the National Security Agency after graduation for at least one and a half times their length of study.

National Security Agency Undergraduate Training Program Attention: M3222 Fort Meade, MD 20755-6000 (410) 859-4590 / Fax: (800) 962-9398



### U.S. Department of Education (ED)

The Department of Education is fully committed to National Education Goal Five, that by the Year 2000, American students will be first in the world in mathematics and science achievement.

Richard W. Riley, Secretary

U.S. Department of Education



### Mission

The mission of the U.S. Department of Education (ED) is to ensure equal access to education and to promote educational excellence throughout the Nation. The Department has four major responsibilities:

- ► To collect data and oversee research on America's schools and to disseminate this information to educators and the public.
- To identify and focus National attention on major issues and problems in education.
- To enforce Federal statutes prohibiting discrimination in programs and activities receiving Federal funds and to ensure equal access to education for everyone.
- ➤ To establish policies relating to Federal financial aid for education, to administer distribution of those funds, and to monitor their use.

### **Background**

Originally created as a non-Cabinet-level Department in 1867, it soon became the Office of Education, where for more than a century it served primarily to collect information and statistics about the Nation's schools. In the late 1950s the Office's mission was expanded when concerns about the quality of education led to the creation of various programs to improve it. These programs were increased in the 1970s to support National efforts to help students gain equal access to quality education. In October 1979, Congress passed Public Law 96-88, creating the current U.S. Department of Education.

## Role in Mathematics and Science Education

The Department of Education provides resources to increase opportunities for students to learn mathematics and science. ED also supports research and assistance programs to improve mathematics and science education, collects data on student learning, and conducts studies on the condition of science and mathematics education.

ED's role is broadly based and connected to every level of formal education. The Department's programs reach nearly every school system and postsecondary institution. These programs support mathematics, science, and technical education for the disadvantaged and handicapped and students for whom English is not the primary language. The Department also supports the integration of science and mathematics learning with vocational and technical education. However, since most of ED's funds are allocated by formula, the actual amount expended on mathematics and science education is often determined by the grant recipient.

With the passage in 1994 of the Educate America Act: Goals 2000, which calls for States and school districts to develop systemic plans for educational reform, ED expects that mathematics and science activities will be increasingly integral to the new reforms. Also, passage of the Improving America's Schools Act of 1994 expanded the scope of the EDfunded Eisenhower Program to all of the core academic subjects, which serves to integrate mathematics and science activities to a greater degree with other subjects.

### Elementary and Secondary Education

Approximately 95 percent of direct ED mathematics and science programs serve the precollege level. The Department aims to provide a balanced portfolio of programs that will benefit teachers, students, and schools at all educational levels. The cornerstone of ED's effort is the Eisenhower Mathematics and Science Education State Grant Program, which is the largest single K–12 mathematics and science program supported by any Federal agency.

### **Higher Education**

Most ED postsecondary education funds are allocated through grants or individual student financial aid. While many programs support opportunities to learn mathematics and science, only a few programs, such as the National Science Scholars Program, are directly targeted at these subjects; other postsecondary programs address broader educational purposes.

### How Mathematics and Science Education Programs Are Administered

ED does not have a single major operating unit specifically charged with overseeing mathematics and science education. Rather, it is organized by educational level (elementary and secondary education) and particular educational concern (e.g., educational research and improvement, and vocational, bilingual, and special education). Mathematics and science education activities are carried out within these larger units.

### Administrative Offices for Mathematics and Science Education

## Office of Educational Research and Improvement (OERI)

OERI supports and conducts research on education, collects and analyzes education statistics, disseminates information, and supports and improves library education and services. The Eisenhower National Program specifically supports mathematics and science. In general, however, mathematics and science are part of the broader OERI educational mission.

Office of Educational Research and Improvement Office of Reform Assistance and Dissemination U.S. Department of Education 555 New Jersey Avenue NW Washington, DC 20808-5645 (202) 219-2116 / Fax: (202) 219-2053

## Office of Elementary and Secondary Education (OESE)

OESE supports elementary and secondary education through such programs as the Eisenhower Professional Development Program, which supports sustained and intensive high-quality professional development in the core academic subjects, including mathematics and science. Other programs within OESE, such as



Title I, Compensatory Education, have a broader educational mission and also support professional development.

Christine Jackson / Audrey M. Smith, Education Program Specialists Office of Elementary and Secondary Education U.S. Department of Education Portals Building 600 Independence Avenue SW Washington, DC 20202-6140 (202) 260-2465 / Fax: (202) 205-0302 E-mail: Christine\_Jackson@ed.gov or Audrey\_Smith@ed.gov

### Office of Postsecondary Education

The Office of Postsecondary Education supports postsecondary education through Federal student aid and programs in higher education, including international education, Historically Black Colleges and Universities, and accreditation. Although most of the programs do not specifically target mathematics and science education, they may be used to support those content areas.

Office of Postsecondary Education U.S. Department of Education Regional Office Building 7th and D Streets SW Washington, DC 20202-5100 (202) 708-5547

## National Programs for K-I2 Education

### **Blue Ribbon Schools Program**

This program identifies and gives National recognition to public and private schools that are unusually effective in meeting National, State, and local goals and in educating their students. The program honors schools that show outstanding effectiveness in leadership, organizational vitality, teaching environment, curriculum and instruction, student environment, and parent and community support. To be recognized as a National school of excellence, the school must have unusually strong programs in all areas of school life. Elementary schools and secondary schools are recognized in alternate years. In addition, recognized schools may receive optional honors in specific areas.

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U.S. Department of Education
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Washington, DC 20808-5643
(202) 219-2217

### Center for Research on the Education of Students Placed at Risk

This project develops programs for elementary school math, science, and social studies that are based on the premise that children are active constructors of knowledge. These programs emphasize discovery, experimentation, cooperative learning, and open-ended problem solving. They are being developed and evaluated in high-poverty urban and rural schools.

Roots and Wings Project
Center for Research on the Education of
Students Placed at Risk
The Johns Hopkins University
3505 North Charles Street
Baltimore, MD 21218
(410) 516-8800 / Fax: (410) 516-8890
E-mail: jhollifi@inet.ed.gov

## Eisenhower National Clearinghouse for Mathematics and Science Education

The Eisenhower National Clearinghouse is developing a comprehensive collection and catalog of K–12 curriculum materials. Databases containing the catalog of materials in various formats, text, evaluations of selected materials, and other resources for math and science education are available online and on CD-ROM. Selected resources are also available in print.

Len Simutis, Director
Eisenhower National Clearinghouse
The Ohio State University
1929 Kenny Road
Columbus, OH 43210-1079
(800) 621-5785
(614) 292-7784 / Fax: (614) 292-2066
E-mail: info@enc.org
WWW: http://www.enc.org

## Eisenhower Professional Development Federal Activities Program

Under legislation passed in 1994, the Eisenhower Program was expanded to cover all core academic subjects. The Eisenhower Professional Development Federal Activities Program currently focuses on projects that seek to transform the education system to achieve high standards of student performance through systemic reform. The Eisenhower National Clearinghouse and the Eisenhower Regional Consortia, which are described in this section, illustrate activities supported by the program. Discretionary grant competitions will be held annually depending on availability of funds.

Eisenhower Professional Development Federal Activities Program Office of Educational Research and Improvement U.S. Department of Education 555 New Jersey Avenue NW, Room 502 Washington, DC 20208-5572 (202) 219-2169 / Fax: (202) 219-2053

## Eisenhower Professional Development Program

This program provides formula grant assistance to State and local education agencies, institutions of higher education, and nonprofit organizations to help ensure that teachers and other staff and administrators have access to high-quality professional development.

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E-mail: Christine\_Jackson@ed.gov or Audrey\_Smith@ed.gov

## Eisenhower Professional Development State Grants Program

The Eisenhower Professional Development Program (Title II of the Elementary and Secondary Education Act of 1965 [ESEA], as amended) was enacted in 1994 as part of the Improving America's Schools Act of 1994. The Title II program is the largest Federal program supporting professional development activities to improve teaching and learning. Part B of Title II authorizes the State formula grant program. Under this program, funds flow through the States to local schools by formula and to institutions of higher education and nonprofit organizations by competitions administered by State agencies for higher education. The grants support and help shape State and local professional development activities in the core academic subjects with a continued focus in mathematics and science. For specific information on your State, contact the Eisenhower Coordinator for the State Educational Agency (K-12) or the State Agency Higher Education listed in the State Highlights section.

Office of Elementary and Secondary Education U.S. Department of Education Portals Building 600 Independence Avenue SW Washington, DC 20202-6140 (202) 260-2465 / Fax: (202) 205-0302

### Eisenhower Regional Consortia

The Eisenhower Professional Development Federal Activities Program funds 10 Regional Mathematics and Science Education Consortia. Working closely with the Clearinghouse, the Consortia provide information and technical assistance to help States and school districts provide improved mathematics and science programs in accordance with National standards. They also train and provide techni-



cal assistance to teachers, administrators, and other educators to help them use exemplary instructional materials, teaching methods, curricula, and assessment tools.

Eisenhower Professional Development Federal Activities Program Office of Educational Research and Improvement U.S. Department of Education 555 New Jersey Avenue NW, Room 502 Washington, DC 20208-5572 (202) 219-2169 / Fax: (202) 219-2053

### **ERIC** (Educational Resources **Information Center)**

ERIC is an international information network that acquires, catalogs, and provides access to educational literature. The ERIC system comprises 16 subject-specific clearinghouses; a central processing and reference facility; a document reproduction service; and ACCESS ERIC, a one-stop contact point for new users of the system. To learn more about ERIC, contact ACCESS ERIC at (800) LET-ERIC.

The ERIC Clearinghouse on Mathematics, Science, and Environmental Education, located at The Ohio State University, acquires, selects, and processes high-quality printed materials (such as reports, curricula and instructional materials, evaluations, and information on programs, practices, and policies) in science, mathematics, and environmental education. The Clearinghouse provides a variety of services and products to help educators, administrators, researchers, and others stay current on a broad range of issues. It provides reference and referral services in science and mathematics and maintains partnerships for the exchange of information with numerous other organizations. It also produces publications, bibliographies, ERIC Digests, syntheses, and summaries on mathematics and science topics, and compilations of promising programs and practices.

David Haury, Director ERIC Clearinghouse for Science, Mathematics, and Environmental Education The Ohio State University 1929 Kenny Road Columbus, OH 43210-1080 (614) 292-6717 or (800) 276-0462 E-mail: ericse@osu.edu

#### Field-Initiated Studies Program

ED, through OERI, funds educational research projects proposed by individuals; institutions of higher education; and public and private institutions, organizations, and agencies. Applicants propose research topics related to OERI's five National institutes:

National Institute on Early Childhood Development and Education Attention: Joseph Caliguro (202) 219-1596

National Institute on Education of At-Risk Students Attention: Beth Fine (202) 219-1315

National Institute on Governance, Finance, Policy-Making, and Management Attention: Edward Fuentes (202) 219-2032

National Institute on Postsecondary Education, Libraries, and Lifelong Learning Attention: Delores Monroe (202) 219-2229

National Institute on Student Achievement, Curriculum, and Assessment Attention: Clara Lawson-Copeland (202) 219-2028

To contact a specific institute, include the appropriate "attention" information provided above. One application package contains information regarding all five institutes. To request an application, write to:

Field-Initiated Studies Program Office of Educational Research and Improvement U.S. Department of Education 555 New Jersey Avenue NW, Room 620 Washington, DC 20208-5531 E-mail: fis@inet.ed.gov

### Fund for the Improvement of **Education**

This fund supports Nationally significant programs to improve the quality of education, assist all students to meet challenging State content standards, and contribute to the achievement of the National Education Goals.

Lois N. Weinberg Office of Educational Research and Improvement U.S. Department of Education 555 New Jersey Avenue NW, Room 502h Washington, DC 20208-5645 (202) 219-2147 / Fax: (202) 219-2053 E-mail: lweinberg@inet.ed.gov

### Javits Gifted and Talented Students **Education Program**

This program funds projects that help schools identify and respond to the special education needs of gifted and talented students, especially those who are disadvantaged, handicapped, or have limited English proficiency.

Office of Educational Research and Improvement U.S. Department of Education 555 New Jersey Avenue NW Washington, DC 20208-5645 (202) 219-2116 / Fax: (202) 219-2053 E-mail: patricia\_ross@ed.gov or elizabeth barnes@ed.gov

### **National Assessment of Educational Progress (NAEP)**

NAEP has measured the educational achievement of American students for more than two decades. Its 1996 mathematics and science assessments of fourth, eighth, and twelfth graders featured several testing innovations. In mathematics and science, students devoted more than half their time to "constructed response" questions that may have included extended problem solving. The science assessment contained a hands-on task for all students, a study of portfolios for fourth and eighth graders, and an assessment of the best twelfth graders. The math assessment measured students' estimating skills, allowing them to use calculators more often than in the past. Results from the 1992 NAEP math assessment are available from the National Center for Educational Statistics at OERI.

Gary W. Phillips Office of Educational Research and Improvement U.S. Department of Education 555 New Jersey Avenue NW Washington, DC 20208 (202) 219-1761

### **National Education Longitudinal** Study of 1988 (NELS:88)

Through NELS:88, the National Center for Educational Statistics is following a sample of 25,000 eighth graders on a two-year cycle. Individual cohort members (including dropouts in the follow-ups) were surveyed in 1988, 1990, and 1992, along with their parents, principals, and teachers. These same members were resurveyed in 1994. To allow researchers to examine cognitive growth over time, test data in mathematics, science, reading, and social studies also were collected from members. Other data collected by NELS:88 include enrollment patterns in mathematics and science courses, student attitudes toward those subjects, instructional practices used by their teachers, and high school transcripts.

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### National Research and Development Center on Achievement in School Mathematics and Science

This center is one of seven National education, research, and development centers supported by ED. The research projects at the core of the Center's activities are organized around five thematic elements: modeling, argument and standards of evidence, big ideas and technologies, equity, and assessment. Studies are carried out as part of design collaboratives, in which researchers work with teachers and schools at the elementary, middle, and high school levels. The goal is to design and implement "test beds" to support the development and validation of practices leading to higher levels of achievement for all students.

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Achievement Center
Wisconsin Center for Education Research
University of Wisconsin-Madison
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#### **National Science Standards**

The National Research Council of the National Academy of Sciences, with a grant from the Eisenhower National Program, developed science content standards that specify what students are expected to learn in grades K-12. Teachers and other science educators, scientists, and the general public were extensively involved by reviewing and refining the standards. More than 80 organizations served as liaisons to the project. Draft content standards were distributed in late 1994. Separate working groups, funded by a coalition of other Federal agencies, are developing teaching and assessment standards in close cooperation with those who developed the content standards. A complete set of the final standards-content, teaching, and assessment—was disseminated in late 1995. (The National Council of Teachers of Mathematics has already developed mathematics standards that are in use across the country.)

Dr. Angelo Collins, Director National Science Education Standards Project National Research Council 2101 Constitution Avenue NW, HA 486 Washington, DC 20418 (202) 334-3417

### **Regional Educational Laboratories**

Through the Office of Educational Research and Improvement, ED funds a network of 10 regional educational laboratories, each serving a specific region of the United States, including its territories. The laboratories identify effective teaching techniques and school improvement efforts within their regions, provide technical assistance, and share information with State

and local educators through newsletters, research syntheses, conferences, and the electronic media. As part of their overall program, which is not subject-matter specific, the laboratories have undertaken an initiative to improve mathematics and science education. They are collecting, analyzing, and synthesizing information about curriculum frameworks, performance assessment methods, and successful mathematics and science programs and practices.

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## Regional Technology in Education Consortia (R\*TEC)

ED, through OERI, established the Regional Technology in Education Consortia (R\*TEC) program in the fall of 1995 to help States, districts, schools, adult literacy centers, and other educational institutions use advanced technology to support improved teaching and student achievement. The R\*TECs' role in educational technology is unique in two ways: their emphasis is regional, and their primary goal is to ensure that technology is used effectively to support school reform. Program strategies include professional development, technical assistance, and information dissemination. The R\*TECs work in a complementary and collaborative way with technical assistance providers funded by ED-such as Comprehensive Regional Assistance Centers, the Eisenhower Regional Consortia for Mathematics and Science Education, and the Regional Educational Laboratories—and with other nationwide educational technology support efforts, such as TechCorps.

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E-mail: cconnor@inet.ed.gov

### Star Schools Program

This program funds partnerships that use telecommunications and other technologies to improve educational opportunities for students in mathematics, science, foreign languages, literacy skills, vocational education, and other subjects. Services, including programming and equipment, have been provided to schools and communities in both rural and urban areas. A variety of technologies are supported including satellite, fiber optics, compressed video, computer networks, and cable.

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U.S. Department of Education
555 New Jersey Avenue NW
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### **Teacher Networking Project**

Curricula, classroom teaching, and teacher professional development will be enhanced through online use of electronic teacher networks and shared knowledge in programs supported by more than \$1.8 million in grants from ED. The networks link teachers with specialists who can help them improve their skills and knowledge of subject matter. Fifteen grants have been given to projects in 13 States, including an American Indian Nation, a State university research foundation, two regional educational laboratories, a private agency, and both rural and urban schools and school districts. Projects include teacher mentoring activities and development of curriculum materials for electronic networking.

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## Third International Mathematics and Science Study

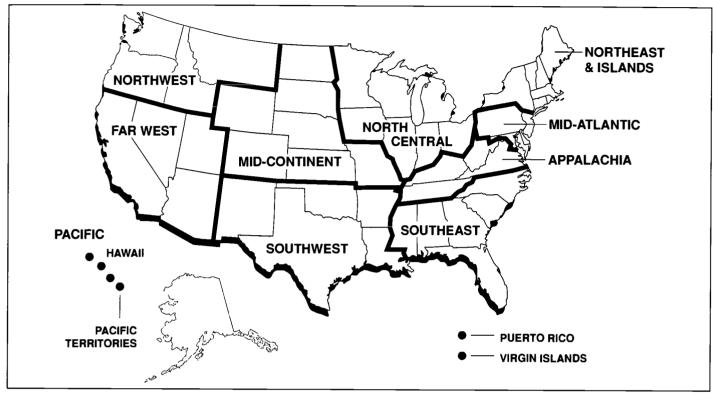
The National Center for Educational Statistics is conducting the U.S. portion of the Third International Mathematics and Science Study being coordinated by the International Association for the Evaluation of Education Achievement. The study will measure student achievement in mathematics and science in more than 40 countries. In 1995, each country assessed fourth, eighth, and twelfth grade students and twelfth grade specialists in mathematics and science. The study focuses on student proficiency and also includes performance assessments, a videotape study of instructional practices, and case studies of key policy issues in education. Teacher, school, home, and societal factors will provide a context in which to gauge student achievement and differences among countries.

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### **U.S.** Department of Education (ED)

Eisenhower National Clearinghouse and Regional Consortia



The Eisenhower National Program supports a National Clearinghouse and 10 Regional Consortia that together form a coordinated, field-based network to promote systemic reform of mathematics and science education. Working closely with the Regional Consortia, the Eisenhower National Clearinghouse collects, catalogs, and disseminates information, curriculum materials, and other resources for K–12 mathematics and science education. At the State and local levels, the Regional Consortia provide information and technical assistance to educators and policymakers. The regional service boundaries of the consortia are identical to those of the regional educational laboratories.

### Regional Consortia

Appalachia Region Eisenhower Regional Math/Science Consortium at AEL Arlington,Virginia

Far West Region
WestEd Eisenhower Regional Consortium for
Science and Mathematics Education
San Francisco, California

Mid-Atlantic Region
Mid-Atlantic Eisenhower Consortium for
Mathematics and Science Education
Philadelphia, Pennsylvania

Mid-Continent Region
Eisenhower High Plains Consortium for
Mathematics and Science
Aurora, Colorado

North Central Region Midwest Consortium for Mathematics and Science Education Oak Brook, Illinois Northeast and Islands Region
Eisenhower Regional Alliance for
Mathematics and Science Education
Reform

Montpelier, Vermont, and Cambridge, Massachusetts

Northwest Region
Science and Mathematics Consortium for
Northwest Schools
Portland, Oregon

Pacific Region
Pacific Mathematics and Science Regional
Consortium
Honolulu, Hawaii

Southeast Region
Eisenhower Consortium for Mathematics and
Science Education at SERVE
Tallahassee, Florida

Southwest Region
Eisenhower Southwest Consortium for the
Improvement of Mathematics and Science
Teaching
Austin, Texas

### National Clearinghouse

Eisenhower National Clearinghouse for Mathematics and Science Education Columbus, Ohio

### National Program Office

Eisenhower Professional Development Federal Activities Program Office of Educational Research and Improvement Washington, DC

Note: Information verified February, 1997.



### U.S. Department of Energy (DOE)



### Mission

The Department of Energy (DOE), in partnership with our customers, contributes to the welfare of the Nation by providing the technical information and the scientific and educational foundation for the technology, policy, and institutional leadership necessary to achieve efficiency in energy use, diversity in energy sources, a more productive and competitive economy, improved environmental quality, and a secure National defense.

### **Background**

DOE was created in 1977 by the Department of Energy Organization Act, which consolidated into one Cabinet-level department the responsibilities previously carried out under the Atomic Energy Commission, the Energy Research and Development Administration, several other small, independent energy-related agencies and offices in other Federal departments. DOE and its contractors employ approximately 146,000 men and women, more than one-third of whom fill positions in DOE's scientific, engineering, and technical workforce. In addition to DOE's Headquarters components, the Department has an extensive field structure of National laboratories, research facilities, regional operations and support offices, and regional power administrations that are dispersed across urban and rural areas of the United States.

## Role in Mathematics and Science Education

In recognition of its need for well-educated, highly skilled scientific and technical personnel to carry out its basic research and development and operational missions, DOE has made education an essential part of its mission. DOE provides opportunities for students and faculty to use its laboratories and facilities for hands-on research experiences. DOE supports the National effort to improve science education for all students through local and regional educational partnerships. DOE promotes increased participation of traditionally underrepresented populations in mathematics, science, engineering, and

technology in the Department's education programs and partnerships.

### **Elementary and Secondary**

DOE utilizes the unique scientific and technical resources of its laboratories through local and regional education partnerships with urban and rural school districts, businesses, and industry. These partnerships introduce new approaches to teaching science and mathematics and contribute to systemic improvement in science, mathematics, engineering, and technology education.

### **Higher Education**

As part of a continuum of efforts to keep students in the science pipeline, DOE supports undergraduate, graduate, postgraduate, and faculty-level science education programs, including those that encourage students from underrepresented groups to pursue scientific and technical studies and participate in cutting-edge research. These activities include research participation appointments, fellowships, faculty institutes and workshops, conferences, and visiting staff lectures.

## How Mathematics and Science Education Programs Are Administered

DOE educational programs are administered by the Office of Science Education and Technical Information through its 10 National laboratories, more than 30 specialized research facilities, and area, field, regional, and operation offices. Each facility conducts its own education programs and makes its resources available to precollege and university faculty and students. Each center plans and administers a range of precollege and university science education programs that vary according to laboratory specialization and local needs. The programs place special emphasis on providing students and their teachers with hands-on experiences in cutting-edge science and technology.

## Administrative Offices for Mathematics and Science Education

### AlliedSignal Aerospace Company

AlliedSignal Aerospace operates the Kansas City Plant to produce nonnuclear components. Production activities are directed toward electrical and electronic products, mechanical products, and plastic products.

Richard Bennett AlliedSignal Aerospace Company Federal Manufacturing and Technologies PO Box 419159, 2000 East 95th Street Kansas City, MO 64141-6159 (816) 997-5937 / Fax: (816) 997-7259

### **Ames Laboratory**

Ames Laboratory conducts fundamental research in the physical, chemical, materials, mathematical, engineering, and environmental sciences that underlie energy-generation, conversion, and transmission technologies.

Connie Hargrave, Ph.D., Manager Ames Laboratory Education Programs 252 TASF Ames Laboratory Iowa State University Ames, IA 50011 (515) 294-5343 / Fax: (515) 294-6206 E-mail: cph@iastate.edu

### **Argonne National Laboratory**

This large multiprogram laboratory is operated by the University of Chicago for the U.S. Department of Energy. The laboratory's mission is basic research and technology development to meet National goals in energy technology, environmental quality, industrial competitiveness, scientific leadership, and educational infrastructure. The Argonne Laboratory strives continually to improve its leading-edge capabilities in science and engineering with an emphasis on its recognized core competencies.



Robert Springer, Ph.D., Interim Director Division of Educational Programs Argonne National Laboratory 9700 South Cass Avenue, Building 223 Argonne, IL 60439 (630) 252-4114 / Fax: (630) 252-3193 E-mail: springer@dep.anl.gov

### Associated Western Universities, Inc.

This consortium of 64 colleges and universities administers a variety of National and regional science education programs, including those at the precollege level.

Thomas Squires, President Associated Western Universities, Inc. 4190 South Highland Drive, Suite 211 Salt Lake City, UT 84124 (801) 273-8900 / Fax: (801) 277-5632 E-mail: info@sl.awu.org

### **Bates Linear Accelerator Center**

Operated by the Massachusetts Institute of Technology, this academic nuclear physics research laboratory produces highly skilled scientists and fundamental knowledge in nuclear and particle physics.

Dr. Kenneth D. Jacobs Bates Linear Accelerator Center PO Box 846 Middleton, MA 01949 (617) 253-9509 / Fax: (617) 253-9599 E-mail: SAPP@bates.mit.edu

### **Bechtel Nevada**

Bechtel Nevada provides architectural and engineering services to the U.S. Department of Energy at the Nevada Test Site and monitors groundwater to track radionuclide transport.

Dawn Merritt, Communications Manager Bechtel Nevada Office of Public and Employee Communications PO Box 98521, M/S - 0039 Las Vegas, NV 89193-8521 (702) 295-5792 / Fax: (702) 295-1859 E-mail: meritdl@doe.nv.gov

### **Bonneville Power Administration**

This DOE power marketing administration services the Pacific Northwest States (Oregon, Washington, Idaho, and western Montana).

Joan McNamara, Community Education Coordinator Bonneville Power Administration PO Box 3621 AR-7-C Portland, OR 97208-3621 (503) 230-3709 / Fax: (503) 230-5884 E-mail: jhmcnamara@bpa.gov

### **Brookhaven National Laboratory**

This laboratory conducts applied research in the physical, biomedical, and environmental sciences and in selected energy technologies.

Karl Swyler, Head Educational Programs Brookhaven National Laboratory 14 Brookhaven Avenue, Building 438 PO Box 5000 Upton, NY 11973-5000

(516) 344-7171 / Fax: (516) 344-5832 E-mail: swyler@bnl.gov

## Fermi National Accelerator Laboratory

This laboratory conceives, develops, constructs, and operates complex research facilities for the fundamental research of high-energy physics and the properties of matter.

Marge Bardeen, Education Office Fermi National Accelerator Laboratory PO Box 500, MS 226 Batavia, IL 60510 (630) 840-2031 / Fax: (630) 840-8248 E-mail: mbardeen@fnal.gov

### Fernald Environmental Management Project

This project focuses on waste management, environmental restoration, and other environmental safety and health compliance issues.

Sue Walpole, Public Affairs Fernald Environmental Management Project PO Box 538704 Cincinnati, OH 45253-8704 (513) 648-4026 / Fax: (513) 648-4011 E-mail: susan\_walpole@fernald.gov

## Idaho National Engineering Laboratory

This is the DOE lead laboratory for systems engineering. Major mission areas include nuclear research and development, environmental management, fuel reprocessing, and waste management. Biotechnology applications, agricultural engineering, and applied engineering are emerging research and development programs at the Lab.

Dr. Constance C. Blackwood, Manager Academic and Education Relations Idaho National Energy Laboratory 1520 Sawtelle Drive Idaho Falls, ID 83405-2437 (208) 526-9221 / Fax: (208) 526-1880 E-mail: cb6@inel.gov

## Inhalation Toxicology Research Institute (ITRI)

ITRI conducts basic and applied research to improve understanding of the nature and magnitude of the impact on human health of inhaling airborne materials.

Marcy Wood, Specialist Inhalation Toxicology Research Institute PO Box 5890 Albuquerque, NM 87185 (505) 845-1257 / Fax: (505) 845-1198 E-mail: mwood@lucy.tli.org

## Lawrence Berkeley National Laboratory

This laboratory supports a wide range of research activities in fields ranging from astrophysics to energy conservation.

Roland Otto, Director Lawrence Berkeley National Laboratory Center for Science and Engineering Research One Cyclotron Road, Building 938C Berkeley, CA 94720 (510) 486-5325 / Fax: (510) 486-6660 E-mail: rjotto@lbl.gov

## Lawrence Livermore National Laboratory

This laboratory serves as a major National resource in applied science and engineering.

Barry Goldman, Acting Education Program
Manager

Lawrence Livermore National Laboratory Livermore, CA 94550 (510) 422-5177 / Fax: (510) 422-6079 E-mail: goldman1@llnl.gov

### Los Alamos National Laboratory

This laboratory has the dual mission of developing nuclear weapons and of applying science and technology to major problems of interest to the country.

Dennis Gill, Group Leader Science Education and Outreach Los Alamos National Laboratory PO Box 1663 / STB-EPO MSF-671 Los Alamos, NM 87545 (505) 667-8680 / Fax: (505) 665-6871 E-mail: dgill@lanl.gov

### Morgantown Energy Technology Center

This center conducts research on fossil energy, clean coal technology, and environmental protection.

Larry Headley Morgantown Energy Technology Center PO Box 880 Morgantown, WV 26507-0880 (304) 285-4314 / Fax: (304) 285-4292 E-mail: lheadl@metc.doe.gov

## National Institute for Petroleum and Energy Research (NIPER)

NIPER was established in Bartlesville, Oklahoma in 1918 as a research laboratory to aid the development of the region's oil and gas industry. NIPER's efforts are currently



focused on supporting the U.S. Department of Energy's National Oil Program. Research, development, and technology transfer programs at NIPER aid independent operators in applying methods to sustain production of oil and gas from domestic reservoirs and to provide reliable data for processing heavy crude oils.

Judy Kokesh, Technology Transfer Specialist National Institute for Petroleum and Energy Research PO Box 2565 Bartlesville, OK 74005 (918) 337-4508 / Fax: (918) 337-4365 E-mail: jkokesh@bpo.gov

### **National Renewable Energy** Laboratory (NREL)

NREL provides teacher workshops, student internships, and summer programs for students and teachers. It also works with several partnership programs, including National Science Foundation's Colorado Statewide Systemic Initiative. NREL conducts student competitions and is the National contact for the Junior Solar Sprint Competition.

Linda Lung, Education Programs Manager 1617 Cole Boulevard, Building 15 Golden, CO 80401-3933 (303) 275-3044 / Fax: (303) 275-3076 E-mail: linda\_lung@nrel.gov

### **Naval Petroleum Reserves**

The Naval Petroleum Reserves are responsible for managing, operating, maintaining and producing the Naval Petroleum Reserves in California. The Reserves work to achieve the greatest value and benefits to the United States with consideration of the interests of the joint owners.

Todd G. Goode, Public Affairs Naval Petroleum Reserves in California U.S. Department of Energy PO Box 87 Tupman, CA 93276 (805) 763-6067 / Fax: (805) 763-6699

### Oak Ridge Institute for Science and Education

This institute administers a wide range of local, National, and international programs in energy-related education, training, and research.

Wayne Stevenson, Assistant Director Oak Ridge Institute for Science and Education Science/Engineering Education Division PO Box 117 Oak Ridge, TN 37831-0117 (423) 576-3283 / Fax: (423) 241-5219 E-mail: stevensw@orau.gov

### Oak Ridge National Laboratory

This laboratory conducts basic and applied research and development to meet energy and environmental challenges, including competencies in energy production and uses, environmental science and technology, advanced materials, neutron-based science, and high-performance computing.

Linda Cain, Director Oak Ridge National Laboratory Office of University and Science Education PO Box 2008, Building 5500A, MS 6366 Oak Ridge, TN 37831-6366 (423) 576-3886 / Fax: (423) 241-6776 E-mail: 9LC@ornl.gov

### Oak Ridge Operations Office

This office provides outreach programs to local precollege schools, conducts environmental education activities, and provides information about regional programs.

Greg Mills, Education Coordinator DOE Oak Ridge Operations Office ORNL Site Office, ER-111 Oak Ridge National Laboratory Building 4500 North, MS 6269 PO Box 2008 Oak Ridge, TN 37831 (423) 576-0951 / Fax: (423) 574-9275 E-mail: millsga@ornl.gov

### **Pacific Northwest National** Laboratory

This laboratory offers a broad array of research and development capabilities, with a focus on environmental quality, transfer of scientific knowledge, and engineering innovations.

Jeff Estes, Deputy Manager University and Science Education Programs Pacific Northwest National Laboratory PO Box 999, MS K1-22 Richland, WA 99352 (509) 375-2820 / Fax: (509) 375-2576 E-mail: jc\_estes@pnl.gov

#### **Pantex Plant**

This plant has five primary missions: to fabricate chemical high explosive components for nuclear weapons; to assemble nuclear weapons for the Nation's stockpile; to maintain and evaluate those weapons; to disassemble weapons being retired from the stockpile; to serve as an interim storage site for plutonium components from retired weapons.

Debra Halliday, Educational Outreach Coordinator Pantex Plant, External Affairs, Building 16-12 PO Box 30020 Amarillo, TX 79177 (806) 477-5038 / Fax: (806) 477-5743 E-mail: dhallida@pantex.com

#### Pinellas Plant

This plant ended its Defense Program Mission in 1994 and is aggressively promoting the plant's technology to support the private sector economic development. High technology once used for the weapons stockpile and a highly skilled workforce make the plant a unique and valuable asset to the community.

Brenda Ricchi, Specialist Pinellas Plant, Public Affairs PO Box 2908 Largo, FL 33779-2908 (813) 541-8516 / Fax: (813) 541-8778 E-mail: Brend\_L. Ricchi@ccmail.orl.mmc.com

### Pittsburgh Energy Technology Center

This center conducts research on synthetic liquid fuels, coal combustion, gasification, and related phenomena.

Fred Brown Pittsburgh Energy Technology Center Office of Research and Development PO Box 10940 Pittsburgh, PA 15236 (412) 892-5942 / Fax: (412) 892-6204

### **Princeton Plasma Physics** Laboratory

This laboratory conducts research in magnetic

Diane Carroll, Head, Science Education Princeton Plasma Physics Laboratory Princeton University James Forrestal Campus PO Box 451, Route 1 Princeton, NJ 08543 (609) 243-2107 / Fax: (609) 243-2112 E-mail: dcarroll@pppl.gov

### **Rocky Flats Plant**

This plant is a key facility in nuclear weapons research, development, and production.

Gene McCarthy, Educational Outreach Coordinator Rocky Flats Plant, Community Relations, **Building 460** PO Box 928 Golden, CO 80402-0928 (303) 966-2200 / Fax: (303) 966-6633 E-mail: gene.mccarthy@rfets.gov

### Sandia National Laboratories, California

These laboratories apply engineering and scientific capabilities to nuclear weapons technology, energy research, and other areas of National interest.



**BEST COPY AVAILABLE** 

Karen P. Scott, Science and Technology Outreach Manager Sandia National Laboratories/California 7011 East Avenue, MS 9904 PO Box 969 Livermore, CA 94550

(510) 294-3760 / Fax: (510) 294-1526 E-mail: KPScott@Sandia.gov

### Sandia National Laboratories, New Mexico

These laboratories apply engineering and scientific capabilities to nuclear weapons technology, energy research, and other areas of National interest.

Bill Dawes, Director
Diversity Leadership and Education
Outreach
Sandia National Laboratories/New Mexico
PO Box 5800, MS 1351
Albuquerque, NM 87185-1356
(505) 844-1280 / Fax: (505) 844-1222
E-mail: WRDawes@Sandia.gov

### Savannah River Ecology Laboratory (SREL)

SREL acquires and communicates knowledge of ecological processes and principles.

Dr. J Vaun McArthur
Savannah River Ecology Laboratory
Environmental Outreach and Education
Division
Program Office, Drawer E
Aiken, SC 29802
(803) 725-9726 / Fax: (803) 725-3309
E-mail: mcarthur@srel.edu

### Savannah River Site (SRS)

SRS is a key DOE facility, focusing on National security work, environmental cleanup and waste management, and economic development and technology transfer initiatives. Owned by the DOE and operated under contract by the Westinghouse Savannah River Company, the complex covers 310 square miles.

Lynn T. Bertsch, Education Programs Community Outreach Division Westinghouse Savannah River Company PO Box 616 Aiken, SC 29808 (803) 652-1813 / Fax: (803) 652-1898 E-mail: lynn.bertsch@srs.gov

## Stanford Linear Accelerator Center

This center carries out experimental and theoretical research in high-energy physics and develops new techniques for particle acceleration. Synchrotron radiation is used for research in bio-medicine and environmental and materials science.

Helen Quinn, Education Officer Stanford Linear Accelerator Center PO Box 4349, Bin-81 Stanford, CA 94309 (415) 926-2713 / Fax: (415) 926-4500 E-mail: quinn@slac.stanford.edu

### **Strategic Petroleum Reserve**

The Strategic Petroleum Reserve stockpiles crude oil and supplements oil supplies in the marketplace.

Durinda Robinson, Special Assistant Strategic Petroleum Reserve 900 Commerce Road East New Orleans, LA 70123 (504) 734-4312 / Fax: (504) 734-4672 E-mail: Durinda.Robinson@spr.doe.gov

## Thomas Jefferson National Accelerator Facility

Jefferson Lab supports research and education in nuclear physics. Focus is on advancements in accelerator physics, electron beams, detector equipment, data acquisition, and superconducting radiofrequency technology.

Janet H. Tyler, Science Education Manager Thomas Jefferson National Accelerator Facility 12000 Jefferson Avenue Newport News, VA 23606 (757) 269-7164 / Fax: (757) 269-5065 E-mail: tyler@ilab.gov

### Western Area Power Administration (WAPA)

WAPA markets and distributes Federal power and capacity to a service area covering 15 of the western States.

Kevin Petts Western Area Power Administration-Phoenix PO Box 6457 615 South 43rd Avenue Phoenix, AZ 85005 (602) 352-2770 / Fax: (602) 352-2454

## National Programs for K-I2 Education

### Associated Western Universities Precollege Science Education Programs

The Associated Western Universities, Inc. is a consortium of 64 colleges and universities that administers a variety of National and regional science education programs, including those at the precollege level.

Thomas Squires, President Associated Western Universities, Inc. 4190 South Highland Drive, Suite 211 Salt Lake City, UT 84124 (801) 273-8900 / Fax: (801) 277-5632 E-mail: info@sl.awu.org

## Bates Linear Accelerator Center Outreach Programs

Tours, tutorials, and mini-workshops are available for civic groups and precollege field trips.

Wade Sapp, Principal Research Scientist Bates Linear Accelerator Center PO Box 846 Middleton, MA 01949 (617) 253-9519 / Fax: (617) 253-9599 E-mail: SAPP@bates.mit.edu

## Chicago and National Science Explorers Program

This program uses PBS "New Explorers" videotapes. Teachers present science concepts to students. Teacher guides are available for use in the classroom and in collaboration with museums and other science institutions.

Films, Inc. 5547 North Ravenswood Avenue Chicago, IL 60640-1199

Argonne National Laboratory 9700 South Cass Avenue Argonne, IL 60439 (800) 343-4312

### Hands-On Universe

This Lawrence Berkeley Laboratory Program makes cutting-edge astrophysics research tools and technologies available to a wide audience. Via microcomputers and electronic networks, participants can request astronomical images created from the Laboratory's professional-grade telescopes.

Lawrence Berkeley Laboratory
One Cyclotron Road
Center for Science and Engineering
Education
Building 938C
Berkeley, CA 94720
(510) 486-5325 / Fax: (510) 486-6660

### National Education Supercomputer Program (NESP)

In these summer workshops, students and teachers use a Cray Y-MP supercomputer dedicated to education.

Brian Lindow, Manager of Educational Technology Programs Lawrence Livermore National Laboratory PO Box 808 Livermore, CA 94550 (510) 422-6080 / Fax: (510) 423-0418 E-mail: lindowl@llnl.gov



### Pittsburgh Energy Technology Center Outreach Programs

These programs provide energy-related materials and training seminars for K-12 teachers and students. The programs also provide scientists for onsite visits and technical presentations.

McMahan L. Gray, Research Chemist Pittsburgh Energy Technology Center PO Box 1094 MS 141-L Pittsburgh, PA 15236 (412) 892-4826 / Fax: (412) 892-4158 E-mail: gray@petc.doe.gov

## Science Understanding Promotes Environmental Responsibility! (SUPER!)

SUPER! gives teachers content-specific background and pedagogical strategies to assist them in effectively using environmental issues as the vehicle to grab students' attention in the classroom. Sandia brings together the technical resources of Sandia National Laboratories (California) and the education and leadership expertise of the Lawrence Hall of Science and the California Department of Education.

Nancy Wilson, SUPER! Project Leader PO Box 969 7011 East Avenue MS 9904 Livermore, CA 94551-0969 (510) 294-1502 / Fax: (510) 294-1526 E-mail: Nancy-Wilson@Sandia.gov

### Stanford Linear Accelerator Center Summer Internships in Science and Engineering

This is an eight-week research program for underrepresented groups. Students are undergraduates chosen from a National pool of applicants.

Karen McClenahan, Administrative Assistant Stanford Linear Accelerator Center PO Box 4349, MS11 Stanford, CA 94309 (415) 926-2265 E-mail: kmac@slac.stanford.edu



## U.S. Department of Health and Human Services (HHS)

If this country is to tackle one of the most difficult problems we face today—quality health care for all—it is critical that the public understand the science that underlies health. A scientifically informed citizenry is more likely to value the importance of disease prevention strategies and to act on that understanding. Because science is a life-long learning process, we must nurture it in its earliest stages—at the preschool and elementary school levels—and allow our interest and knowledge in it to broaden throughout our adult lives.

Donna E. Shalala, Secretary

U.S. Department of Health and Human Services



### Mission

The U.S. Department of Health and Human Services (HHS) is the Federal Government's principal agency for promoting the health of Americans, providing essential human services, carrying out clinical and basic biomedical and behavioral research, and providing support for predoctoral and postdoctoral research training in the life sciences. Also, HHS has long been concerned with the depth and quality of the scientific workforce and for this reason has launched a comprehensive life sciences education initiative.

### **Background**

HHS was created in 1980 from what was formerly the U.S. Department of Health, Education, and Welfare. The work of HHS is implemented by the Office of the Secretary and four operating divisions: the Social Security Administration, the Health Care Financing Administration, the Administration for Children and Families, and the Public Health Service (PHS). The Public Health Service is the HHS agency with the major mission in science education.

In 1990 the Assistant Secretary for Health established the Public Health Service Life Sciences Education and Science Literacy Board. The Board was charged with developing strategies for ensuring an adequate pool of well-trained personnel to meet future National needs in the life sciences and increasing the level of scientific understanding among youth and adults in the United States. The Board's first significant action was to host the Prologue to Action: Life Sciences Education and Science Literacy Conference. The Conference brought together experts from across the educational and scientific communities to provide recommendations on the role PHS agencies can play in improving science education. Recommendations made at the Conference form the basis for Meeting the Challenge: Achieving Results, the PHS strategy on life sciences education and public understanding of science.

## Role in Mathematics and Science Education

While many Federal agencies have broad educational missions that include support for science education and training, none focus specifically on biomedical and behavioral science education or literacy. HHS uses its expertise in the life sciences to provide new and expanded initiatives to support the National education efforts. The bulk of the Department's science education programs at the precollege and undergraduate levels are targeted toward bringing students who are traditionally underrepresented in the life sciences into the science education pipeline and supporting them as they move into the health professions, graduate programs, and research careers. Through its Public Health Service, HHS is enlarging the public's understanding and appreciation for the life sciences, increasing the exposure of students at all levels to biomedical and behavioral research, and expanding efforts to recruit and retain underrepresented groups.

### **Elementary and Secondary**

Traditionally, HHS-supported training has focused on graduate and postdoctoral students. However, with the recent decrease in the number of high school and college students majoring in the sciences, the Department has begun to dedicate more of its education and training efforts to precollege education. The Department views science education as a continuum from preschool to adulthood. Elementary programs such as partnerships with local schools and school systems, and the Summer Internship Program at the high school level, allow HHS to use its greatest resource—its scientists and technical staff-to increase the enthusiasm of both teachers and students for science.

The Department offers programs targeted to the important transitional period from junior to senior high. It also operates a long-standing program for minority high school students, the Minority High School Student Research Apprentice Program (MHSSRAP). In addition, HHS provides K–12 teachers with workshops and research opportunities and collaborates with them to increase

opportunities for interaction with scientists, consult on curriculum improvement projects, and explore collaborative activities with other public- and private-sector organizations.

### **Higher Education**

To ensure the availability of well-trained professionals to meet National health research goals, graduate support has been the primary emphasis of HHS education programs. This highly successful effort has nurtured many of the newest disciplines in the life sciences today—biotechnology, human genome research, and the search for the biologic components of mental illness. Integral to the Department's mission, graduate training is a stated requirement in section 487 of the Public Health Service Act.

The efforts of HHS to recruit and retain talented undergraduate students in life sciences careers are accomplished primarily through direct financial support—grants, traineeships, and awards—to individuals and institutions. As in its programs for graduates, the Department supports undergraduate students traditionally underrepresented in the life sciences. Long-standing programs such as the Minority Access to Research Careers Honors Undergraduate Research Training Program, the Minority Biomedical Research Support Program, and the Health Careers Opportunity Program demonstrate the Department's commitment to this goal.

### **Public Understanding of Science**

Public understanding of science is an important HHS priority. An informed public is better able to make judgments about the personal and societal implications of science and technology. Literacy in the life sciences improves the public's ability to be more effective health care consumers. Within the Department, PHS agencies are examining their programs to determine where science education messages can be more fully integrated into existing disease prevention, health promotion, consumer education, and other public outreach programs. The Department is also spearheading an interagency effort to increase the public's understanding of science by chairing the National Science and Technology Council on Education and Training Working Group on Public Understanding of Science.



## How Mathematics and Science Education Programs Are Administered

The Public Health Service is the operating division within the Department of Health and Human Services that is most involved with science education. The agencies within PHS administer their own educational programs, although several PHS-wide efforts are currently underway through the Life Sciences Education and Science Literacy Board. The Office of Science Education Policy at the National Institutes of Health is responsible for policy development and coordination of science and training efforts for the Public Health Service and HHS.

## Administrative Offices for Mathematics and Science Education

## Division of Extramural Outreach and Information Resources

In addition to providing general information on grant programs, this division has publications on research and training opportunities.

Division of Extramural Outreach and Information Resources Office of Extramural Research National Institutes of Health 6701 Rockledge Drive, Suite 6095 Bethesda, MD 20892-7910 Phone: (301) 435-0714 / Fax: (301) 480-0525 E-mail: asknih@odrockm1.od.nih.gov

#### Office of Science Education (OSE)

The Office of Science Education serves the National Institutes of Health intramural community, the wider scientific community, and the Nation by developing and sponsoring outstanding programs in science education, curriculum development, and biomedical research training. OSE provides leadership in the National effort to increase public understanding and appreciation of science and its role in the development of new therapies and new approaches to health.

Bruce Fuchs, Acting Director Office of Science Education National Institutes of Health 6100 Executive Boulevard, Room 5H01 Bethesda, MD 20892 (301) 402-2469 / Fax: (301) 402-3034

## National Programs for K-12 Education

### Minority High School Student Research Apprentice (MHSSRA) Program

MHSSRA has three areas of focus: high school students and inservice and preservice teachers. MHSSRA's six-to eight-week apprenticeship program cultivates interest among minority high school students in the biomedical sciences. Students work with local biomedical investigators and learn research procedures, collect and analyze data, help write scientific papers, and deliver presentations at research seminars.

### MHSSRA Program for Inservice Teachers

The MHSSRA Inservice Program supports the participation of minority teachers or teachers who teach large numbers of minority students in cutting-edge biomedical research. Teachers work with biomedical investigators who are committed to broadening the teachers' scientific knowledge and understanding of technical skills in the hope that it will transfer into the classroom.

### MHSSRA Program for Preservice Teachers

The MHSSRA Preservice Program supports the participation of minority undergraduate students interested in a science teaching career in biomedical research while working with local biomedical investigators. The program's intent is to expand teachers' basic scientific knowledge and expose them to research experiences before they enter the classroom.

National Center for Research Resources National Institutes of Health Biomedical Research Support Program 1 Rockledge Centre 6705 Rockledge Drive, MSC 7965 Bethesda, MD 20892-7965 (301) 435-0760

## National Cancer Institute Student Research Training Program

The primary objective of this program is to provide training and practical experience to highly motivated high school students who work in the National Cancer Institute intramural programs and who are interested in pursuing biomedical research careers. The training program is divided into four areas of research—cancer etiology, prevention and control, treatment, and biology.

National Cancer Institute National Institutes of Health Equal Employment Office Building 31, Room 10A33 9000 Rockville Pike Bethesda, MD 20892 (301) 496-6266

### National Institute of Environmental Health Sciences (NIEHS) Summers of Discovery Environmental Science Education Outreach Program

Summers of Discovery is a program for precollege science teachers and high school through graduate school students who are interested in pursuing careers in the biological sciences. The program matches participants with volunteer mentors from the intramural program to spend two to three months in the mentor's laboratory working on a research project. Participants are exposed to some of the latest biomedical, molecular, and cellular techniques.

National Institute of Environmental Health Sciences National Institutes of Health Summers of Discovery Attention: Personnel Office PO Box 12233/RTP.NC 2NN09 Research Triangle Park, NC 27709 (919) 541-4265

### Research Supplements for Underrepresented Minority High School Students

This program is designed to provide support for summer research experiences for underrepresented minority students. Any Principal Investigator holding an active National Institutes of Health research grant may be eligible to submit a request for an administrative supplement to support a minority high school student.

Office of Grant Inquiries Division of Research Grants National Institutes of Health Suite 3032, NSC 7762 6701 Rockledge Drive Bethesda, MD 20892 (301) 435-0714

### Research Supplements to Promote the Recruitment of Individuals with Disabilities into Biomedical Research Careers

This program is designed to provide research experiences for qualified high school students with disabilities who wish to participate in an ongoing research project during the summer or during the school year.



Office of Grant Inquiries Division of Research Grants National Institutes of Health Suite 3032, NSC 7762 6701 Rockledge Drive Bethesda, MD 20892 (301) 435-0714

## Summer Science Enrichment Program

Conducted at sites across the country, this program encourages underrepresented minorities and underserved youth to pursue professional careers in science, mathematics, and research. During the six-week sessions, scientists act as teachers and mentors. The program includes classroom and laboratory experiences, as well as weekly field trips and evening seminars.

National Cancer Institute
National Institutes of Health
Executive Plaza North, Room 240
6130 Executive Boulevard
Rockville, MD 20892
(301) 496-8680



# U.S. Department of Housing and Urban Development (HUD)



#### **Mission**

The U.S. Department of Housing and Urban Development (HUD) is the principal Federal agency responsible for programs concerned with the Nation's housing needs, fair housing opportunities, and the development and improvement of the Nation's communities.

## **Background**

The Department was established in November 1965. Major offices include Housing, which administers the Federal Housing Administration (FHA) mortgage insurance programs; Community Planning and Development, which funds homeless programs and administers the Block Grant funds to States and cities for urban improvement projects; Public and Indian Housing, which funds the construction and renovation of publicly owned and managed housing through local Public and Indian Housing Authorities; Fair Housing and Equal Opportunity, which enforces anti-discrimination laws and promotes open housing plans; and Policy Development and Research, which formulates new initiatives and evaluates program experience. HUD's programs are administered through a National network of 70 State and local offices.

## Role in Mathematics and Science Education

HUD is not directly involved in programs of mathematics and science education. However, the Department strongly supports the National Education Goals as an integral part of its commitment to strengthen families and communities. HUD's programs and activities affecting education focus on the special populations served by the Department, particularly low-income families receiving housing assistance, families in public housing, and minorities.

# How Mathematics and Science Education Programs Are Administered

Each office within the Department is responsible for administering its own education programs.

## Administrative Offices for Mathematics and Science Education

## Office of Community Planning and Development

The Department has a program of assistance to Historically Black Colleges and Universities that both builds the capabilities of the institution and involves faculty and students in real-world problems of economics, planning, and social issues in nearby communities.

Evette Idora
Office of Community Planning and
Development
Department of Housing and Urban
Development
451 Seventh Street SW, Room 7218
Washington, DC 20410
(202) 708-1590

#### Office of Lead Hazard Control

In December 1991, HUD created an Office of Lead-Based Paint Abatement and Poisoning Prevention to develop guidelines and regulations applicable to HUD and other Federally supported housing programs. While this office supports a program of public information about these hazards, the Environmental Protection Agency (EPA) manages the National information clearinghouse.

Ronald Morony, Deputy Director Office of Lead Hazard Control Department of Housing and Urban Development 451 Seventh Street SW Washington, DC 20410 (202) 755-1739 / Fax: (202) 755-1000 E-mail: Ronald\_J\_Morony@hud.gov

## Office of Public and Indian Housing

HUD's child care assistance program supports the goal of early intervention for children entering school. No programs, however, prescribe the content of the early child-hood curriculum. The Department strongly supports the concept of drug education and prevention for school-age children as a way to help make public housing communities drug-free. Most Department-sponsored drug prevention programs have education components.

Sonya Burgos Office of Public and Indian Housing Department of Housing and Urban Development 451 Seventh Street SW, Room 4112 Washington, DC 20410 (202) 708-1197, ext. 4227 Fax: (202) 401-7965



## U.S. Department of the Interior (DOI)

Education is the key to unlocking the vast potential of the individual and the means by which society will meet the myriad social, economic, and environmental challenges of the future. **Bruce Babbitt, Secretary** 

U.S. Department of the Interior



#### **Mission**

As the Nation's principal conservation agency, the U.S. Department of the Interior (DOI) has responsibility for most of our Nationally owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife, and biological diversity; preserving the environmental and cultural values of our National parks and historical places; and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people by encouraging stewardship and citizen participation in their care. The Department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

## **Background**

The Department of the Interior was formed on March 3, 1849. The natural resource stewardship responsibilities of the Department are carried out by its nine bureaus with more than 60 regional and 1,500 field offices.

## Role in Mathematics and Science Education

DOI's stewardship mission and its extensive scientific and technological expertise present unique opportunities for educational outreach. With more than 440 million acres of land, 467 wildlife refuges, 75 fish hatcheries, and 356 National parks, including battlefields and seashores, DOI provides many opportunities for people to learn about science by observing nature firsthand.

#### **Elementary and Secondary**

About half of the Department's precollege efforts directly support students through workshops, informal classes, and student work appointments. DOI offers educational activities at its many field sites, develops curriculum materials, and provides educational opportunities to special populations. In addition, DOI supports mathematics and science instruction at the Bureau of Indian Affairs

#### **Higher Education**

The majority of DOI's undergraduate programs provide student support, mostly in the form of student work appointments. Many of the bureaus enter into partnerships with State and academic institutions to further research and education in natural resource management. In addition, DOI provides support to Historically Black Colleges and Universities, Hispanic-serving institutions, and Native American Colleges and Universities. Graduate research programs fund basic and applied research and generate Earth science data. The Department also offers predoctoral and postdoctoral fellowships.

### **Public Understanding of Science**

Fostering effective stewardship of the Nation's public lands and resources is a top Department priority. With hundreds of parks, refuges, fish hatcheries, and other field sites, many opportunities exist for visitors to gain an understanding of the natural sciences.

## How Mathematics and **Science Education Programs Are Administered**

DOI's educational programs are administered by its nine bureaus. Because the Department's education outreach is a grassroots effort, information requests can be handled most effectively by the DOI Field Offices and facilities listed in the State Highlights section of this publication.

## **Administrative Offices for Mathematics and Science Education**

#### Bureau of Indian Affairs (BIA)

The BIA works with tribal governments and Alaskan Native village communities to encourage and support tribal efforts to selfgovern and to provide needed programs and services on the reservations. Developing forest lands, leasing mineral rights, directing agricultural programs, and protecting water and land rights are included in this responsibility. The BIA funds 187 elementary and secondary schools in 23 States with more than

46,000 students enrolled in preschool, kindergarten, and grades 1 through 12. Types of schools include day schools, on- and offreservation residential schools, and peripheral dormitories. The BIA also funds 23 Tribally Controlled Community Colleges and operates two post-secondary institutions. Higher education grants for undergraduate students, graduate student assistance, and adult education funds are made available through con-

Charles G. Geboe. Chief Branch of Elementary and Secondary Education Office of Indian Education Programs Bureau of Indian Affairs U.S. Department of the Interior 1849 C Street NW, MS 3512, MIB Washington DC 20240 (202) 219-1129 / Fax: (202) 219-9583 E-mail: cgeboe@ENAN.UNM.EDU

## **Bureau of Land Management** (BLM)

Operating under the principles of multiple use and sustained yield for the benefit of all Americans, the BLM oversees National public lands. Approximately 270 million acres of public land, located primarily in the West and in Alaska, comprise about one-eighth of the total land area of the United States. The BLM promotes natural resource and environmental education through a broad range of activities conducted by field offices in 12 Western States and in scattered areas throughout the East. State offices can provide information on local district offices that sponsor environmental education programs.

Mary Tisdale, Chief Office of Environmental Education and Volunteers Bureau of Land Management 1849 C Street NW, LS-Room 1275 Washington, DC 20240 (202) 219-9649 / Fax: (202) 219-2493

#### **Bureau of Reclamation**

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner. A major interest is safe and dependable water supplies for agricultural, municipal, industrial, and

domestic users. The Bureau also oversees production of hydroelectric energy at Reclamation powerplants. Other mandates are to provide recreational and fish and wildlife benefits for the public, to enhance river regulation and navigation, and to control damaging floods.

Kathie Marsh Bureau of Reclamation Denver Federal Center D-5100, Building 67 Denver, CO 80225 (303) 236-9336 ext. 223 Fax: (303) 236-3930 E-mail: kmarsh@do.usbr.gov

## Minerals Management Service (MMS)

The MMS provides a variety of educational services and information to teachers and students. A major topic is the environmentally correct management of offshore natural gas, oil, and other resources, but information is also available on a number of other subjects including geology, environmental and socioeconomic sciences, marine biology, underwater archaeology, and beach restoration, MMS professionals have worked with schools in some States to develop energy resource curricula. Teacher inservice programs and classroom visitations may include booklets, brochures, posters, newsletters, and slide presentations as well as statistical and other offthe-shelf technical publications. Some of these materials are available upon request through MMS headquarters and/or regional offices. Availability may be limited, but arrangements can be made for duplication of some materials at cost to the requester.

Lyn Herdt, Chief, Office of Communications Minerals Management Service Office of Communications 1849 C Street NW, LMS 4230 Washington DC, 20240-0001 (202) 208-3985 / Fax: (202) 208-3968 E-mail: lyn.herdt@smtp.mms.gov

## National Biological Service (NBS)

The NBS works with others to provide the scientific understanding and technologies needed to support the sound management and conservation of our Nation's biological resources.

Office of External Affairs National Biological Service 1849 C Street NW Washington, DC 20240 (703) 648-4060 or 4062 E-mail: alex\_greg@nbs.gov

#### National Park Service (NPS)

The principle responsibility of the NPS is to administer the National Park System. The amem is composed of more than 370 areas

of great diversity, including parks, monuments, historic sites, battlefields, seashores and lakeshores, and recreational areas.

Robert Huggins, Division of Interpretation National Park Service Department of the Interior PO Box 37127 Washington, DC 20013-7127 (202) 523-1056 / Fax: (202) 523-1061 E-mail: bob\_huggins@nps.gov

## Offshore Minerals Management Service (MMS) & Royalty Management Program

The MMS, a bureau of the Department of the Interior, manages the mineral resources of the Outer Continental Shelf in an environmentally sound and safe manner. The bureau is responsible for the timely collection, verification, and distribution of mineral revenues from Federal and Indian lands.

Lyn Herdt, Chief Office of Communications Minerals Management Service 1849 C Street NW, LMS 4230 Washington DC, 20240-0001 (202) 208-3985 / Fax: (202) 208-3968 E-mail: lyn.herdt@smtp.mms.gov

### Office of the Secretary (OS)

OS coordinates all education programs implemented by its bureaus and agencies through the DOI Education Committee. OS supports education efforts through several ongoing projects including an education program inventory, a coordinated education program evaluation effort, and a joint project for submission of products for the Internet.

Sylvia Jones, Education Coordinator Office of the Secretary 1849 C Street NW, MS 2759 Washington, DC 20240 (202) 208-3254 / Fax: (202) 208-3620 E-mail: sjones@ios.doi.gov

## Office of Surface Mining Reclamation and Enforcement (OSMRE)

OSMRE has a twofold mission: to protect people and the environment from the adverse effects of coal mining, while recognizing the Nation's vital need for energy from coal. To those ends, OSMRE regulates current mining operations and helps repair lands that were mined and left unreclaimed and abandoned.

Sarah Donnelly, Chief, Branch of Training Office of Surface Mining Department of the Interior 1951 Constitution Avenue NW, Room 640 (NC) Washington, DC 20240 (202) 208-2826 / Fax: (202) 219-3111

## U.S. Fish and Wildlife Service (FWS)

The FWS conserves, protects, and enhances fish and wildlife and their habitats for the continuing benefit of the American people. Migratory birds, endangered species, freshwater and anadromous fisheries, and certain marine animals are primary FWS responsibilities.

Michael Smith, Chief, Division of Education National Education and Training Center U.S. Fish and Wildlife Service Department of the Interior Route 3, Box 49 Kearneysville, WV 25430 (304) 876-1600, ext. 346 E-mail: SmithM@mail.fws.gov

### U.S. Geological Survey (USGS)

The mission of the USGS is to provide geologic, topographic, and hydrologic information that contributes to wise management of the Nation's natural resources and that promotes the health, safety, and well-being of the people. This information consists of maps, databases, and descriptions and analyses of geological entities including water, energy, and mineral resources, land surface, underlying geologic structure, and dynamic processes of the Earth.

Denise Wiltshire, Chair, USGS Education Committee U.S. Geological Survey 116-E National Center Reston, VA 22092 (703) 648-7114 / Fax: (703) 648-7069

## National Programs for K-12 Education

## Aquatic Resources Education Program

This program was designed to increase public understanding of the Nation's water resources and aquatic life and to develop responsible attitudes toward the aquatic environment.

Gene Stephenson, Education Administrator U.S. Fish and Wildlife Service Division of Federal Aid Arlington Square, Room 140 4401 North Fairfax Drive Arlington, VA 22203 (703) 358-2156 / Fax: (703) 358-1837

## Celebrating Wildflowers/Wildflower Week

This nationwide program focuses on highlighting wildflower education with year-round activities. The program includes interpretation and restoration events on public lands. Jeff Carroll, Botanist 5353 Yellowstone Road Cheyenne, WY 82009 (307) 775-6090 / Fax: (307) 775-6082

## Earth Science Information Centers (ESIC)

The ESICs offer nationwide information and sales service for U.S. Geological Survey map products and Earth science publications. This network of ESICs provides information about geologic, hydrologic, topographic, and landuse maps; books and reports; aerial, satellite, and radar images and related products; Earth science and map data in digital format and related application software; and geodetic data. ESICs can also provide information on private and public producers of Earth-science-related products throughout the United States. For more information contact any ESIC or call (800) USA-MAPS.

Earth Science Information Center, Reston 507 National Center Reston, VA 22092 (703) 648-6045 or (800) USA-MAPS Fax: (703) 648-5548

#### Earth Stewards

This six-site nationwide pilot program enlists natural resource professionals to develop and implement an environmental education program with educators, students, and other community members. The program includes interdisciplinary classroom activities and hands-on community conservation projects. Training is provided for both natural resource professionals and educators.

Claire Cassel, Environmental Education Specialist National Education and Training Center 4401 North Fairfax Drive MS 304 Webb Arlington, VA 22203 (703) 358-2504 / Fax: (703) 358-2283

#### **EarthFax**

To anyone with a touch-tone phone and access to a fax machine, the U.S. Geological Survey (USGS) EarthFax system provides the latest word on earthquake activity around the world, plus information on ordering maps, the status of our water resources, and the latest products, events, and minerals information. To access EarthFax, dial (703) 648-4888. Easy-to-follow instructions guide users through the process of having the specific information they want faxed to the facsimile machine they specify. Callers can request up to three documents per call. Calls to the EarthFax system do not need to be placed from a fax telephone. Callers can provide the number of a remote fax to which material can be forwarded.

Mitch Snow Department of the Interior U.S. Geological Survey Public Affairs Office 119 National Center Reston, VA 22092 (703) 648-4460 or 4888 Fax: (703) 648-5939

### Federal Junior Duck Stamp Conservation and Design Program

This program uses art as a catalyst to interest K-12 students in conservation. Focusing on migratory birds and other wildlife that depend on wetland habitats, the curriculumbased program crosses cultural, ethnic, social, and geographic boundaries. Since this kind of art activity requires an understanding of wildlife anatomy and environmental science. it can be a valid barometer of a student's grasp of these scientific elements. Students enter their drawings of North American ducks, swans, or geese in their State contest. Student winners from each State win a free trip to Washington, DC, to compete in the Federal Duck Stamp Contest. First place receives a \$2,500 scholarship, and the design is used to create the Junior Duck Stamp.

JoAnn Schneider, Program Director Federal Junior Duck Stamp Conservation Program Department of the Interior 1849 C Street NW, Room 2058 Washington, DC 20240 (202) 208-4354

## Haskell Math and Science Summer Workshop

Participants of this workshop prepare culturally sensitive curriculum materials pertaining to math, science, and natural resources for elementary teachers in Bureau of Indian Affairs schools and to better prepare teachers in the areas of curriculum development, selection, and evaluation.

Dr. Sharon Atkinson, Summer Math and Science Workshop Coordinator Department of Natural and Social Sciences 155 Indian Avenue Haskell Indian Nations University Lawrence, KS 66046 (913) 749-8428

#### Heritage Education Program

This Bureau of Land Management program is multifaceted, providing educational experiences and teaching resources with a focus on archaeology, history, and paleontology. The program is appropriate for the school setting as well as for outdoor classrooms, museums, and other informal learning environments. Materials for educators include Intrigue of the Past, a teacher's guide to archaeology and ideas for classroom activities.

Project Manager Bureau of Land Management Imagination Team Anasazi Heritage Center, PO Box 758 27501 Highway 184 Dolores, CO 81323 (303) 882-4811

### National Fishing Week

This National program is promoted in Wyoming through various Fishing Days and other educational activities that seek to capture the interest of the public in fishing activities. Hands-on activities, such as casting and, fishing techniques, are offered, and participants learn about the types of fish and places to fish, especially on public land.

Mark Gorges, Fisheries Biologist 5353 Yellowstone Road Cheyenne, WY 82009 (307) 775-6100 / Fax: (307) 775-6082

## Native Americans in Science Program

This program has three primary goals: (1) making Native Americans aware of the numerous types of jobs available in math and science, (2) elevating student awareness of their environment and of their natural resources and conservation, and (3) motivating students in science and mathematics.

Sam Azure, Principal United Tribes Technical College Theodore Jamerson Elementary School 3315 University Drive Bismarck, ND 58554 (701) 255-3285

#### Parks as Classrooms

This program offers teachers an opportunity to use the National parks to augment class-room instruction. In most locations, emphasis is on ecological and biological principles, but a few locations focus on geological, meteorological, and oceanographic principles. The National Park Service offers workshops in the parks to encourage teachers to build their curricula around park resources.

Robert Huggins, National Program Director Parks as Classrooms Program National Park Service PO Box 37127 Washington, DC 20013-7127 (202) 565-1050 / (202) 565-1061 E-mail: bob\_huggins@nps.gov

## Project Water Education for Teachers (WET)

Project WET develops diverse and innovative approaches to a balanced water education program that appeals to a wide spectrum of educators and students. The Project produces a variety of educational publications, models, and programs that respond to



the varied learning styles of young people. Highlights include natural and social sciences, mathematics, and the arts. States currently involved in Project WET are listed in the State Highlights section of this publication.

Dennis Nelson, Director National Project WET 201 Culbertson Hall Montana State University Bozeman, MT 59717 (406) 994-5392

### **Project WILD**

This project provides training and curriculum materials for teachers interested in the environmental sciences. The guides contain more than 80 supplementary, interdisciplinary activities for grades K–12. Guides are free to teachers attending the training session. The Project WILD coordinator in each State can provide additional information.

Betty Olivolo, Director Project WILD 5430 Grosvenor Lane Bethesda, MD 20814 (301) 493-5447 / Fax: (301) 493-5627

## Research Apprenticeship Program for Students

Selected high school students learn about the management of natural and cultural resources on the Nation's public lands through first-hand work experience. Students work directly with scientists and other professionals. The program operates in the Western U.S.

Steven Shafran Bureau of Land Management Denver Federal Building 390 Union, Suite 350 Denver, CO 80025-5698 (303) 969-5698

## Science Education Training Project Workshops

Sinte Gleska University, in cooperation with the South Dakota School of Mines and Technology, has hosted the Science Education Training Project since 1991. Two workshops are offered exclusively for teachers of American Indian students in grades K–8. The primary goal is to provide these elementary teachers with content, methods, activities, evaluative strategies, and curriculum development skills necessary for the implementation of culturally based, hands-on science and math activities in their classrooms. This is an empowerment process that includes the development of confidence, as well as knowledge and skills.

Dr. Leland Bordeaux, Director Sinte Gleska University PO Box 8 Mission, SD 57555

Phone: (605) 856-2886 / Fax: (605) 856-2011

## Southwestern Indian Polytechnic Institute (SIPI) College Bound Math and Science Enrichment Program

During the school year, the students involved in this program work on assigned projects with coordinators at their high schools. The projects are used to keep the students working toward their education goals and to strengthen the students' computer networking skills. Since 1991, a one week workshop at the NERSC Supercomputer facilities in Livermore, California, has been included in the program. This workshop introduces students to the Cray Supercomputer and the skills required to use it. The workshops are conducted by staff from both the Sandia and Lawrence Livermore National Laboratories.

Joe Skenandore, College Bound Coordinator Southwestern Indian Polytechnic Institute SIPI College Bound Math and Science Enrichment Program PO Box 10146 Albuquerque, NM 87184 (505) 897-5347

#### Suitcase for Survival

This special education campaign acquaints young people with protected wildlife and how illegal trade in these species threatens them with extinction. The program is a cooperative effort sponsored by the U.S. Fish and Wildlife Service, the American Zoo and Aguarium Association, the World Wildlife Fund, and the National Fish and Wildlife Foundation, Operated Nationally through zoological parks across the country, the program sponsors training classes for teachers to enable them to use program suitcases, donated by American Tourister, that are filled with confiscated wildlife products and educational materials. The recommended curriculum helps children understand the connection between living animals and the products in the suitcases.

Lynn Baptista, Director of Education American Zoo and Aquarium Association Parks and Aquariums 7970-D Old Georgetown Road Bethesda, MD 20814 (301) 907-7777

## University of Arizona Holistic Science and Whole Language Workshop

This program, funded by the Bureau of Indian Affairs, is designed to provide a high quality Whole Language Math and Science workshop to teachers of American Indian children throughout the United States. The three primary goals of the program are to develop philosophical foundations for the integration of language arts, science, and math, to build the relationships between the use of oral and written language as a tool for the development of science and math concepts, and to add to an established set of teaching and learning strategies.

Dr. Kenneth S. Goodman or Dr. Yetta M. Goodman University of Arizona College of Education Department of Language, Reading, and Culture Tucson, AZ 85729 (602) 621-7868

#### Watchable Wildlife

This program will create a National network of wildlife viewing areas by forming State coalitions that consist of Federal agencies, nonprofit organizations, and environmental associations. Teachers may, for a small fee, purchase a guidebook to their State's Watchable Wildlife facilities. Future plans include the development of interpretive exhibits, visitor centers, environmental and conservation programs, and educational materials. Currently, 20 States participate in this program.

Mark Hilliard, Wildlife Appreciation Program Manager Western Fish and Wildlife Staff 3380 Americana Terrace Boise, ID 83706 (208) 384-3088

### Youth Conservation Corps

This summer employment program is offered by both; the U.S. Department of Agriculture and DOI. Students, ages 15–18, work on projects to further the development and conservation of U.S. natural resources. Work projects are planned, directed, and executed to give enrollees an understanding of their tasks and how their work enhances the environment.

Youth Conservation Corps Coordinator U.S. Department of the Interior National Park Service PO Box 37127, Suite 57 Washington, DC 20013-7217 (202) 343-5514



## **U.S. Department of Justice (DOJ)**

We must work to free our teachers of the social burdens in our schools, such as drugs and violence, so that they may rise to the educational challenge of teaching our children the skills that will meet our Nation's growing scientific and technological needs. Only by making this investment in our children now will they be prepared to maintain America as a first-rate Nation.

Janet Reno, U.S. Attorney General U.S. Department of Justice



#### Mission

The U.S. Department of Justice (DOJ) provides legal advice to the President, represents the Executive Branch in Federal courts, investigates Federal crimes, enforces Federal laws, operates Federal prisons, and provides law enforcement assistance to State and local communities.

### **Background**

The Office of the Attorney General was established in 1789, and the Department of Justice was subsequently established in 1870. Professionals of the highest caliber comprise the Department's many litigating divisions, law enforcement offices, and management and coordination offices.

## Role in Mathematics and Science Education

Compared with the Federal science mission agencies, the Department of Justice does not have a significant focus on mathematics- and science-related occupations. However, the Department conducts numerous programs that support National educational goals, including improving student performance in mathematics and science. In addition, mathematics and science play an important role in certain aspects of the Department's mission, particularly the laboratory operations of the Federal Bureau of Investigation and the Drug Enforcement Administration. Opportunities for the active participation of students in the scientific endeavors of the Department are necessarily limited by the confidential nature of investigations into illegal activity and the need for security clearance.

#### **Elementary and Secondary**

Most programs offered by DOJ are part of delinquency prevention or volunteer educational outreach, and are not directly related to mathematics or science education.

#### **Higher Education**

DOJ activities have an indirect impact in the areas of education programs in mathematics and science. The Department awards research grants and sponsors graduate research fellowships and summer intern programs.

# How Mathematics and Science Education Programs Are Administered

While DOJ is not a leader among Federal agencies in the field of mathematics and science education, the National Institute of Justice, the Federal Bureau of Investigation, and the Drug Enforcement Administration sponsor programs related to the Department's research efforts.

# Administrative Offices for Mathematics and Science Education

## The Drug Enforcement Administration

The Drug Enforcement Administration supports drug investigations through the eight forensic laboratories located throughout the Nation. Chemists in these facilities participate in various educational activities.

Aaron P. Hatcher, III, Deputy Assistant Administrator Office of Forensic Sciences Drug Enforcement Administration Washington, DC 20537 (202) 307-8866 / Fax: (202) 307-8851

## The Federal Bureau of Investigation (FBI)

The FBI provides training and research to law enforcement through the Forensic Science Research and Training Center. Research at the Center focuses on the development of new methods in forensic science. The Center operates a summer student intern program for upper-level college students.

Donald W. Thompson, Jr., Acting Assistant Director Laboratory Division Federal Bureau of Investigation FBI Building, Room 3090 9th Street and Pennsylvania Avenue NW Washington, DC 20535 (202) 324-4412 / Fax: (202) 324-1093

## The National Institute of Justice, Office of Justice Programs

Created in 1968 as DOJ's principal research branch, the National Institute of Justice awards competitive grants to researchers to conduct studies on the prevention and control of crime and criminal behavior and on the criminal justice system. Grants are also awarded to improve scientific approaches to the forensic investigation of crime as well as to the development and adaptation of law enforcement technologies. The National Institute of Justice disseminates its research findings to the field through a variety of conferences and publications. The Institute also sponsors graduate research fellowships to support work in the field of criminal justice.

Jane Wiseman National Institute of Justice 633 Indiana Avenue NW, Room 846 Washington, DC 20531 (202) 616-3233 / Fax: (202) 307-6394



## **U.S. Department of Labor (DOL)**

Knowledge and skills the market demands. Our challenge is to provide every man and woman, student and worker, with the opportunity to acquire the academic and technical skills they need to achieve the economic security we all want.

Timothy M. Barnicle

Assistant Secretary of Labor for Employment and Training
U.S. Department of Labor



### Mission

The basic concern of the U.S. Department of Labor (DOL) is quality of life for American workers. The Department enforces laws that protect jobs, pension rights, and worker safety and health; helps people find jobs; sponsors training for those who need it; guides the Nation's unemployment insurance system; monitors changes in employment and prices; and provides services and information to workers, employers, teachers, students, business people, government officials, and others.

#### **Background**

The Department was created as a cabinet-level agency by Congress in 1913 "to foster, promote, and develop the welfare of the wage earners of the United States, to improve their working conditions, and to advance their opportunities for profitable employment." Predecessor agencies had existed since 1884, but this legislation marked the first time that a cabinet department was created with the primary function of furthering the interests of working people.

## Role in Mathematics and Science Education

For most agencies and offices within DOL, the major training activity is directed toward Federal staff, and in some cases, State and local staff, to help them carry out their responsibilities. The Department's Employment and Training Administration (ETA) also is involved in broad basic mathematics and science education and vocational training for unskilled and unemployed workers. Training activities focus on vocational technical training skills and basic literacy education, including mathematics and general equivalency diploma (GED) preparation, which is generally provided outside the traditional education system. Among other activities, ETA funds training programs to enable workers to gain the skills they need for employment, primarily those authorized by the Job Training Partnership Act (JTPA), which includes a system of decentralized State and local programs, funded through grants to the States, and the Job Corps.

## How Mathematics and Science Education Programs Are Administered

DOL's mathematics and science education programs are administered by the Department's Employment and Training Administration and operated at the State or community levels.

# Administrative Offices for Mathematics and Science Education

### Employment and Training Administration, Office of Job Training Programs

This office administers eight programs for economically disadvantaged youth and adults.

Theodore Mastroianni, Administrator Office of Job Training Programs Employment and Training Administration U.S. Department of Labor 200 Constitution Avenue NW, Room N4459 Washington, DC 20210 (202) 219-6236 / Fax: (202) 208-5913

The listings below provide descriptions and contact information for three offices of the Employment and Training Administration that administer programs for different populations:

## Office of Employment and Training Programs

This office provides programs for disadvantaged adults, the Summer Youth Employment and Training Programs, and Year-Round Youth Programs.

Office of Employment and Training
Programs
Employment and Training Administration
U.S. Department of Labor
200 Constitution Avenue NW, Room N4459
Washington, DC 20210
(202) 219-5580 / Fax: (202) 219-7190

James Aaron, Director

#### Office of Special Targeted Programs

This office directs the Indian and Native American Programs, Older Worker Programs, Persons with Disabilities Program, and Migrant and Seasonal Farmworker Programs.

Anna Goddard, Director Office of Special Targeted Programs Employment and Training Administration U.S. Department of Labor 200 Constitution Avenue NW, Room N4459 Washington, DC 20210 (202) 219-5500 / Fax: (202) 219-6338

## Office of Worker Retraining and Adjustment Programs

This office administers programs for dislocated workers.

Shirley Smith or Eric Johnson, Program Managers

Office of Worker Retraining and Adjustment Program

Employment and Training Administration U.S. Department of Labor 200 Constitution Avenue NW, Room N5426 Washington, DC 20210

(202) 219-5577 / Fax: (202) 219-5938

## National Programs for K-12 Education

#### Job Corps

This residential employment and training program for severely disadvantaged youth, ages 16–24, prepares young people for employment and entrance into vocational and/or technical schools or other institutions for further education and training. Students receive room and board, books, supplies, and a cash living allowance. The program offers vocational training, English-as-a-second-language (ESL), basic education, and instruction in personal hygiene, nutrition, positive work habits, social skills, parenting, intergroup relations, and constructive use of leisure time. Services are provided at one of more than 100 Job Corps centers across the country.



The individually paced basic education program includes reading, mathematics, and GED and precollege preparation.

John Chowning, Education Specialist Education and Enrollee Support Unit Job Corps Employment and Training Administration U.S. Department of Labor 200 Constitution Avenue NW, Room N4507 Washington, DC 20210 (202) 219-5556 / Fax: (202) 219-5183

## Job Training Partnership Act (JTPA) State and Local Programs for Economically Disadvantaged Adults and Youth

State and local JTPA Programs, available in virtually every part of the country, prepare economically disadvantaged adults and youth to compete in the labor market. Depending on an individual participant's needs, a broad array of services are available through these programs, including vocational training, basic mathematics, and GED instruction. Activities include a special Summer Jobs Program for low-income youth. The summer program has an education component.

Josephine Nieves, Administrator
Office of Employment and Training
Programs
Employment and Training Administration
U.S. Department of Labor
200 Constitution Avenue NW, Room N4469
Washington, DC 20210
(202) 219-6236 / Fax: (202) 219-7190



# U.S. Department of Transportation (DOT)

Sound technological investments can promote long-term economic growth that creates jobs and protects the environment; can help make government more efficient; and can provide the basis for National leadership in application of new technology to economic growth.

Rodney Slater, Secretary

U.S. Department of Transportation



#### Mission

The U.S. Department of Transportation (DOT) will shape the National Transportation Policy to "tie America together" with a safe, technologically advanced, and efficient transportation system. This system will promote economic growth and international competitiveness now and in the future, and will contribute to a healthy and secure environment for us and our children.

### **Background**

Since 1967 the Department has helped keep the Nation's transportation system operating. The Department functions through 10 operating administrations, each of which oversees a different aspect of transportation and implements its own programs directly, reporting to the Secretary of Transportation.

## Role in Mathematics and Science Education

Mathematics and science education is a critical support activity to ongoing DOT programs. Education conveys new technical skills to professionals already in the transportation community. It also develops a pool of trained technical talent to move into jobs in the transportation sector.

#### **Elementary and Secondary**

The Federal Aviation Administration (FAA) offers aviation education programs for educators at all levels (K-college) that stimulate student interest in mathematics and science. FAA-sponsored programs for students include Air Bear for elementary students, the International Aviation Art Contest, and the Aviation Career Education (ACE) Academy summer program for high school students, which focuses on the science of flight and the study of science and careers. In addition, the Research and Special Programs Administration's Volpe National Transportation Systems Center encourages awareness of transportation careers.

#### **Higher Education**

Institutions of higher education can receive DOT assistance, including funding to support curricula and grants for research related to transportation. The Department sponsors cooperative education programs, research fellowships, and scholarships. In addition, most DOT operating administrations have technical laboratories with advanced technology materials and are required to engage in research application and technology transfer activities. DOT is committed to increasing involvement of Historically Black Colleges and Universities and Hispanic-serving institutions in funded programs and activities.

# How Mathematics and Science Education Programs Are Administered

Each operating administration within the Department of Transportation is responsible for its own education programs.

## Administrative Offices for Mathematics and Science Education

## Aviation and Transportation Education Programs

DOT, along with the Federal Aviation Administration (FAA), has designated more than 100 education resource centers across the country. Located at museums, science centers, State transportation and education departments, and schools and colleges with interest in aviation and transportation education, the centers conduct teacher workshops and youth programs and provide assistance to educators and the public. DOT/FAA has also established partnerships with industry and education organizations.

Phillip S. Woodruff
Aviation & Transportation Education
Programs
U.S. Department of Transportation
FAA Headquarters, AHR-15, Suite 515
800 Independence Avenue SW
Washington, DC 20591
(202) 267-3/88 / Fax: (202) 366-3786

## Federal Information Exchange/Minority Online Information System (FEDIX/MOLIS)

All DOT agencies provide information regarding education programs through the FEDIX/MOLIS, an electronic clearinghouse of aviation educational materials, resources, and references. MOLIS provides information on minority institutions and their programs and opportunities. Access is free.

Wendy Crabbs
Aviation & Transportation Education
Programs
U.S. Department of Transportation
(301) 975-0103
E-mail: dot.m@rams-fie.com
WWW: http://www.rams-fie.com

#### National Highway Institute (NHI)

The NHI administers the Dwight David Eisenhower Transportation Fellowship Program, which includes the Eisenhower Graduate Fellowships, the Eisenhower Grants for Research Fellowships, the Eisenhower Historically Black Colleges and Universities Fellowships, the Eisenhower Hispanic-Serving Institutions Fellowships, the Eisenhower Faculty Fellowships, and the Tribal Initiatives Fellowships. The NHI also administers the College Curriculum Program, in which materials developed for short courses are tested by practitioners for effectiveness and shared with colleges and universities.

Ilene D. Payne, Director, University and Grants Program National Highway Institute 901 North Stuart Street, Suite 300 Arlington, VA 22203 (703) 235-0538

## Office of Research Policy and Technology Transfer, Research and Special Programs Administration (RSPA)

RSPA research and technology programs ensure that DOT's research and development program is effectively advancing U.S. transportation technology and expertise. Using a multimodal systems approach, the RSPA provides the Secretary with a critical counterbalance to the focus on the needs of individual modes of transportation in the other



DOT operating administrations. The research and technology programs also provide analyses of specific technology areas and ensure that the Department's efforts integrate with government-wide technology initiatives and priorities. These activities are particularly important in science and technology education. The programs also help ensure that results of DOT research and other innovative efforts from across the country are made available to Federal, State, and local officials, the transportation community, and academia.

Elaine E. Joost, Deputy Director
Office of Research Policy and Technology
Transfer (DRT-2)
Research and Special Programs
Administration
400 Seventh Street SW
Washington, DC 20590
(202) 366-4208 / Fax: (202) 366-3272
E-mail: Jooste@rspa.dot.gov

## National Programs for K-I2 Education

#### International Science Fair

The annual International Science Fair, administered by Science Service, Inc., is the world's largest science fair. The FAA supports this program by providing qualified judges and awards in the Special Awards Program area. The Special Awards Program is sponsored by scientific and engineering societies, Federal agencies, colleges and universities, and private industry

Aviation Education Representative Atlantic City International Airport Human Resource Management Division Atlantic City, NJ 32137 (609) 485-6032 / Fax: (609) 485-4391

## Transportation and Aviation Education Conferences

DOT sponsors an annual National Transportation Education Conference that brings all DOT agencies together with the transportation industry and education communities. In addition, DOT/FAA, the Aviation, Space & Transportation Education Association (ASTEA), and the Magnet Schools of America (MSA) cosponsor the Annual Aviation and Transportation Magnet School Conference.

Phillip S. Woodruff Aviation & Transportation Education Programs U.S. Department of Transportation FAA Headquarters, AHR-15, Suite 515 800 Independence Avenue SW Washington, DC 20591 (202) 366-6370 / Fax: (202) 366-3786



## U.S. Department of Veterans Affairs (VA)

The basics of education are not enough anymore; in order to be competitive in the future, Americans will need a foundation of quality education, and they will need to continue learning throughout their lifetime. I believe, as the President does, that our educational system can achieve international excellence, if we establish clear standards and support realistic student loan programs. The VA will continue to be a major contributor in this area through GI Bill benefits and our involvement in health care education.

Jesse Brown, Secretary U.S. Department of Veterans Affairs



#### Mission

The mission of the U.S. Department of Veterans Affairs (VA) is to serve America's veterans and their families with dignity and compassion and to be their principal advocate in ensuring that they receive the care, support, and recognition they have earned in service to this Nation.

## **Background**

The Department of Veterans Affairs, formerly the Veterans Administration, was elevated to Cabinet level in 1989. The Department has three main components that administer veterans' programs: the Veterans Health Administration, the Veterans Benefits Administration, and the National Cemetery System.

## Role in Mathematics and Science Education

The vast VA workforce, representing diverse science- and technology-related professions, includes physicians, nurses, statisticians, architects, and computer specialists. As part of its mission to provide health care to eligible veterans, the VA provides training and education for health professionals and conducts medical, health, and rehabilitation research. The Department supports graduatelevel education through more than 40 health professions education programs. The Department also administers education benefits to eligible veterans, service persons, and dependents.

# How Mathematics and Science Education Programs Are Administered

Two VA administrative offices are involved in education activities: the Veterans Health Administration and the Veterans Benefits Administration.

## Administrative Offices for Mathematics and Science Education

# The Veterans Health Administration, Office of Academic Affairs

This office conducts the Nation's largest coordinated education and training effort for the health professions. There are no K-12 programs.

Elizabeth M. Short, M.D., Chief, Academic Affiliations
Department of Veterans Affairs
Office of Academic Affiliations (14)
810 Vermont Avenue NW
Washington, DC 20420
(202) 565-7091

## Veterans Benefits Administration, Education Service

This service conducts several basic educational programs for veterans, service persons, and eligible dependents. Some

younger users of the Dependents Education Assistance program may be involved in math and science programs. Assistance is in the form of monthly payments, for a period of up to 45 months, to be used for tuition, books, and subsistence. Young people between the ages of 18 and 26 are eligible if they are children of veterans or servicepersons in several categories: living veterans whose service-connected disabilities are considered permanently and totally disabling, veterans who died of any cause while such service-connected disabilities were in existence, veterans who died of a service-connected disability, or servicepersons who have been listed for a total of more than 90 days as currently missing in action or as currently prisoners of war. Application is made by filing a VA Form 22-5490, which can be obtained from any VA Regional Office.

Celia P. Dollarhide, Director Education Service (22) 810 Vermont Avenue NW Washington, DC 20420 (202) 273-7132 / Fax: (202) 275-2636



# U.S. Environmental Protection Agency (EPA)

Environmental education is an important new initiative at EPA. However, widespread improvements in environmental literacy require a unified commitment from government, business, environmental organizations, and educators alike to increase the quality of our environmental education initiatives.

Carol M. Browner, Administrator U.S. Environmental Protection Agency



#### Mission

The U.S. Environmental Protection Agency (EPA) is responsible for implementing the Federal laws designed to protect the public from environmental hazards, enhance the quality of our natural environment, and expand our knowledge of the environment. The Agency endeavors to accomplish its mission systematically by proper integration of a variety of research, monitoring, standard-setting, enforcement, and educational activities. As a complement to its other activities, EPA coordinates and supports research and antipollution activities of State and local governments, private and public groups, individuals, and educational institutions. EPA also monitors the operations of other Federal agencies with respect to their impact on the environment.

## **Background**

The Environmental Protection Agency was created through Reorganization Plan #3 of 1970, which was devised to consolidate the Federal Government's environmental regulatory activities into a single agency. The plan was sent by President Nixon to Congress on July 9, 1970, and the Agency began operation on December 2, 1970.

The enactment of major new environmental laws and important amendments to older laws in the 1970s and 1980s greatly expanded EPA's responsibilities. The Agency now administers 10 comprehensive environmental protection laws: the Clean Air Act; the Clean Water Act; the Safe Drinking Water Act; the Comprehensive Environmental Response, Compensation, and Liability Act; the Federal Insecticide, Fungicide, and Rodenticide Act: the Toxic Substances Control Act; the Marine Protection, Research, and Sanctuaries Act; the Uranium Mill Tailings Radiation Control Act; and the Pollution Prevention Act. In addition, the National Environmental Education Act of 1990 gave EPA, for the first time, the authority to develop a National environmental education program.

## Role in Mathematics and Science Education

As political leaders and the public continue to recognize the urgency and global nature of environmental challenges, the EPA will be required to respond with still higher quality research, innovative analysis, and sound strategies for public involvement. Currently, more than one-third of the Agency's employees are scientists and engineers, and the demands for highly educated and talented staff will only increase as the scientific complexity of environmental problems increases. Clearly, the Agency has a vested interest in ensuring that the Nation's education system produces students literate in mathematics and science, and that the Nation produces an adequate supply of world-class scientists and engineers. In addition, the Agency believes an environmentally educated public is the best way to bring about voluntary changes in personal behaviors that affect the environment.

#### **Elementary and Secondary**

As a result of the passage of the National Environmental Education Act of 1990, the Agency will focus on two broad areas of environmental education: improving basic science literacy as the core of environmental education for students in grades K–12 (and in college), and informing the general public about environmental consequences of their individual and collective actions and motivating them to address environmental problems.

#### **Higher Education**

EPA offers predoctoral fellowships and traineeships and postdoctoral fellowships. Undergraduate programs provide opportunities for research, work study, and other forms of assistance to students.

# How Mathematics and Science Education Programs Are Administered

The Agency's headquarters in Washington, DC, maintains overall planning, coordination, and control of EPA programs, and two offices at headquarters have responsibilities related to education programs. To ensure that EPA is truly responsive to the American people, the Agency has established 10 regional offices, and each of these offices has an environmental education coordinator. In addition, the EPA maintains field offices in the following categories: laboratories, investigations, and administration.

## Administrative Offices for Mathematics and Science Education

#### **Environmental Education Division**

The mission of this division is to advance and support National and international environmental education efforts, to develop an environmentally conscious and responsible public, and to inspire in all individuals a sense of personal responsibility for the care of the environment.

C. Michael Baker, Acting Director Environmental Education Division U.S. Environmental Protection Agency 401 M Street SW (1707) Washington, DC 20460 (202) 260-4965 / Fax: (202) 260-4095 E-mail: baker.michael@epamail.epa.gov

## Office of Research and Development (ORD)

This office coordinates education programs related to research efforts. Each ORD facility and office plans and administers a range of programs, precollege through graduate, which vary according to laboratory specialization and community needs.



Betty Overton or Ron Slotkin Office of Research and Development U.S. Environmental Protection Agency 401 M Street SW (H-8105) Washington, DC 20460 (202) 260-1557 / Fax: (202) 260-0929

## National Programs for K-12 Education

## Environmental Education and Training Program

In September 1995, EPA entered into a threeyear cooperative agreement with a consortium of nonprofit organizations and academic institutions led by the North American Association for Environmental Education (NAAEE) to operate the second three-year phase of a nationwide environmental education and training program. This program is authorized under Section 5 of the National Environmental Education Act of 1990. Its purpose is to train education professionals to develop and deliver quality environmental education programs. The second phase will focus on supporting and expanding existing quality training efforts; identifying, evaluating, and disseminating information on model education materials, teaching methods, and programs; and strengthening and expanding partnerships and networks. This effort builds upon the work initiated by the National Consortium for Environmental Education and Training (NCEET) led by the University of Michigan, which operated the program from 1992 to 1995.

Kathleen MacKinnon, Project Officer EPA Environmental Education Division (1707) 401 M Street SW Washington, DC 20460 (202) 2604951 / Fax: (202) 260-4095 E-mail: mackinnon.kathleen@epamail.epa.gov

Augusto Medina, Project Manager NAAEE 1255 23rd Street NW, Suite 400 Washington, DC 20037 (202) 884-8788 / Fax: (202) 884-8701 E-mail: gmedina@web.apc.org

## Environmental Education Grants Program

The purpose of this program is to stimulate environmental education by supporting projects to design, demonstrate, or disseminate new practices, methods, or techniques related to environmental education. Projects must demonstrate the potential for wide application and address a high-priority environmental issue. Only State and local agencies and non-profit organizations or institutions are eligible to apply for grants; however, teachers may participate in the program through their school or

another organization. Grants of less than \$25,000 are awarded by the Regional Offices and inquiries should be directed to the appropriate region. Grants of \$25,000 to \$250,000 are awarded from the Washington Office.

George Walker, Grants Specialist Environmental Education Grants Program Environmental Education Division U.S. Environmental Protection Agency 401 M Street SW (1707) Washington, DC 20460 (202) 260-8619 / Fax: (202) 260-4095 E-mail: walker.george@epamail.epa.gov

## Project Air Information Resources for Education (A.I.R.E.)

In cooperation with the American Lung Association, EPA Air and Radiation employees are working with schools Nationally to promote awareness of air quality issues and science. Program volunteers visit classrooms and conduct demonstrations, talks, and interactive sessions about air pollution and the decision-making involved in developing EPA policy from science. Text is available.

Linda Zarro, Coordinator Office of Air and Radiation U.S. Environmental Protection Agency 401 M Street SW (6102) Washington, DC 20460 (202) 260-6621

### **Public Information Centers (PICs)**

PICs provide public access to information selected and maintained by the Federal Government on major ecological and environmental issues. The centers offer publications, data, interactive computer workstations, theaters, and exhibits, although available services may vary from center to center. PICs also supply environmental education materials for K–12 students and teachers. A PIC is located within each of the 10 regional offices.

Public Information Center U.S. Environmental Protection Agency 401 M Street SW (3404) Washington, DC 20460 (202) 260-2080 / Fax: (202) 260-6257 E-mail: Public-Access@epamail.epa.gov

## The President's Environmental Youth Awards (PEYA) Program

Young people from each State are invited to participate in the PEYA Program. This nationwide K–12 program is designed to encourage individuals, school classes, summer camps, public interest groups, and youth organizations to promote environmental awareness and positive community involvement. The two components of the program are the regional certificate program and the

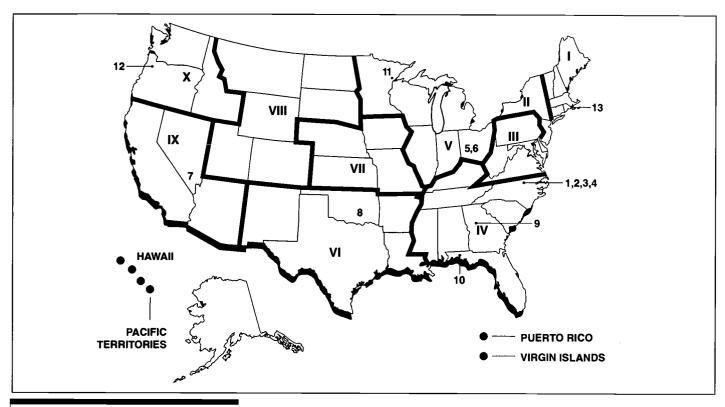
National awards competition. Regional certificates, signed by the President, are awarded to each participant by EPA regional offices. National individual project winners or one representative from a National award-winning group project, along with one sponsor, are honored by EPA headquarters in Washington. Interested individuals or groups may obtain application materials and contest rules by contacting the appropriate EPA Regional Office that services their State. PEYA has been an ongoing project since it was created in 1971 by the White House Office of Education and the U.S. Environmental Protection Agency.

Doris Gillispie, Youth Program Coordinator Environmental Education Division U.S. Environmental Protection Agency 401 M Street SW (1707) Washington, DC 20460 (202) 260-8749 / Fax: (202) 260-0790 E-mail: gillispie.doris@epamail.epa.gov



## **U.S. Environmental Protection Agency (EPA)**

**Regional Office and Research Laboratories** 



## **Regional Offices**

To ensure that EPA is truly responsive to the American people, it has established 10 regional offices. Each office has an Environmental Education Coordinator who oversees participation in regional environmental education programs, which include a variety of activities. Materials and information on environmental issues are also available.

Region I Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont

Region II New Jersey, New York, Puerto Rico, Virgin Islands

Region III Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, West Virginia

Region IV Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee

Region V Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin

Region VI Arkansas, Louisiana, New Mexico, Oklahoma, Texas

Region VII Iowa, Kansas, Missouri, Nebraska

Region VIII Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming

Region IX Arizona, California, Hawaii, Nevada, American Samoa, Guam

Region X Alaska, Idaho, Oregon, Washington

## Research Laboratories and Offices

The Office of Research and Development has research laboratories and offices that plan and administer a range of environmental programs, precollege through graduate level, which vary according to laboratory specialization and community needs.

- Air and Energy Engineering Research Laboratory, Research Triangle Park, North Carolina
- 2. Atmospheric Research and Exposure Assessment Laboratory, Research Triangle Park, North Carolina

- Health Effects Research Laboratory, Research Triangle Park, North Carolina
- 4. Environmental Criteria and Assessment Office, Research Triangle Park, North Carolina
- 5. Risk Reduction Engineering Laboratory, Cincinnati, Ohio
- 6. Environmental Monitoring Systems Laboratory, Cincinnati, Ohio
- 7. Environmental Monitoring Systems Laboratory, Las Vegas, Nevada
- 8. Robert S. Kerr Environmental Research Laboratory, Ada, Oklahoma
- 9. Environmental Research Laboratory, Athens, Georgia
- 10. Environmental Research Laboratory, Gulf Breeze, Florida
- 11. Environmental Research Laboratory, Duluth, Minnesota
- 12. Environmental Research Laboratory, Corvallis, Oregon
- 13. Environmental Research Laboratory, Narragansett, Rhode Island



# National Aeronautics and Space Administration (NASA)

NASA's mission in aeronautics and space, its unique facilities, and specialized workforce provide educators and students a National resource for enhancing and expanding scientific and technological competence. The Agency's commitment to promoting excellence in America's education system is carried out through the integrated application of science, mathematics, and technology that is inherent in NASA's research capabilities, scientific discoveries, advanced technologies, and future explorations.

Daniel S. Goldin, Administrator National Aeronautics and Space Administration



#### **Mission**

As the agency responsible for the Nation's civilian aerospace program, the National Aeronautics and Space Administration (NASA) mission is threefold:

- ► To advance and communicate scientific knowledge and understanding of the Earth, the solar system, and the universe, and to use the environment of space for research;
- ► To explore, use, and enable the development of space for human enterprise;
- To research, develop, verify, and transfer advanced aeronautics, space, and related technologies.

## **Background**

On October 1, 1958, the U.S. Congress created the National Aeronautics and Space Administration through the Space Act. The legislation combined certain military space research programs with the existing National Advisory Committee for Aeronautics to create a unique civilian agency for aeronautical and space activities.

Current major areas of activity include five enterprises: Mission to Planet Earth; Aeronautics; Human Exploration and Development of Space; Space Science; and Space Technology. Ten Field Centers located across the country provide NASA with the expertise to conduct research in all facets of aeronautics and space.

## Role in Mathematics and Science Education

To maintain a leadership role in the 21st century, NASA and other Federal agencies must contribute to systemic reform of American education. NASA's education vision is to promote excellence in America's school systems by involving the educational community in our endeavors to inspire America's students, create learning opportunities, and enlighten inquisitive minds. NASA uses its inspiring mission, unique facilities, and specialized

workforce to conduct science, mathematics, and technology education programs and activities.

### **Elementary and Secondary**

To nurture early enthusiasm for science, mathematics, and technology, NASA has developed a broad range of programs and services for students at the elementary and middle school levels. These programs are specifically designed to use space and aeronautics as the vehicle to inspire students' interest in science, mathematics, and technology. Once interest has been captured, it is imperative to follow through at the secondary level with both formal and informal education experiences. NASA provides programs for teachers and faculty that have been specifically designed to enhance their knowledge, skills, and experience. Additionally, in a continuing effort to address groups that have not been adequately represented in the science and engineering workforce, NASA offers educational programs that are specifically tailored for underrepresented minority students at the middle school and high school levels, as well as for minority teachers and faculty members.

#### **Higher Education**

NASA's higher education programs target faculty, graduate and undergraduate students, colleges and universities, and other organizations with an interest in aeronautics; life, Earth, and space science research; education; and related public service. NASA's programs at the collegiate level feature active participation in NASA research, undergraduate and graduate student financial support, and faculty preparation and enhancement activities.

#### **Public Understanding of Science**

NASA Visitor Centers offer the public a unique chance to see first-hand the past, present, and future of U.S. aerospace research. The Centers display hundreds of artifacts, scale models, and pieces of actual space equipment. Many of the Centers also offer special films, programs, and attractions that highlight achievements of the past 30 years or ideas for future explorations.

# How Mathematics and Science Education Programs Are Administered

NASA's National education programs are carried out through NASA Headquarters and the 10 NASA Field Centers. The Headquarters Education Division of the Office of Human Resources and Education oversees education programs and activities at a National level, while the 10 Field Centers administer segments of the National programs, as well as additional regional and local programs. To find the Field Center serving your State, see the State Highlights section of this publication.

# Administrative Offices for Mathematics and Science Education

NASA's Education Program is carried out through five primary categories: Teacher Preparation and Enhancement, Student Support, Curriculum Support, Systemic Change, and Education Technology.

## Teacher Preparation and Enhancement

NASA facilities, human resources, and programs provide experiences for teachers and college faculty. Focus is on providing access to NASA information in science, mathematics, engineering, and technology and well as enhancing teachers' knowledge and skills in those areas.

#### Student Support

NASA facilities, human resources, and programs provide information, experiences, and research opportunities for K-12 and undergraduate and graduate students. Focus is on the enhancement of knowledge and skills in the areas of science, mathematics, engineering, and technology.

### **Curriculum Support**

Supplementary instructional materials and curricula in science, mathematics, engineering, and technology are based on NASA's



unique mission. Another focus is the development and augmentation of higher education curricula.

#### **Systemic Change**

The unique assets of NASA support local, State, regional, and National efforts to enhance the goals of the educational community. Change is accomplished through individual efforts or through collaboration with a range of partners.

#### **Education Technology**

NASA products and services facilitate the application of technology to enhance both the formal education process and lifelong learning.

Education Division NASA Headquarters, Code FE 300 E Street SW Washington, DC 20546 (202) 358-1110

## Elementary and Secondary Branch Office

This office oversees a broad range of programs and services for educators and students at the elementary and secondary levels.

Elementary and Secondary Branch Education Division NASA Headquarters, Code FE 300 E Street SW Washington, DC 20546 (202) 358-1110

### **Higher Education Branch Office**

This office oversees higher education programs and services created for faculty, graduate and undergraduate students, and colleges and universities.

Higher Education Branch Education Division NASA Headquarters, Code FEH Washington, DC 20546-0001 (202) 358-1531

### **Technology and Evaluation Branch**

This branch disseminates educational products and materials for teachers and students of all grade levels through the NASA Centers, the Educator Resource Center Network (ERCN), NASA Television, and NASA Spacelink. ERCN is a NASA space science educational material distribution system that reaches more than 220,000 educators a year. The system is composed of the NASA Central Operation of Resources for Educators (CORE), NASA Educator Resource Centers (ERCs), and NASA Regional Educator Resource Centers (RERCs), Spacelink complements ERCN by using a computer network to distribute text and graphic information, whereas NASA Television transmits

NASA news and educational videotapes via satellite. CORE serves all nonprofit educators worldwide by maintaining the current list of ERCs and RERCs nearest the caller.

Technology and Evaluation Branch Education Division NASA Headquarters, Code FE Washington, DC 20546-0001 (202) 358-1518

## National Programs for K-12 Education

## Aerospace Education Services Program (AESP)

Focusing on the elementary and secondary school levels, AESP uses NASA's mission to enhance the knowledge, skills, and experience of teachers, to capture the interest of students, and to channel that interest into related career paths. Teacher enhancement is NASA's highest priority. NASA-AESP programs use exemplary teaching practices to expose teachers to a curriculum that includes skills, attitudes, connections, and content. High-quality instructional materials and stateof-the-art educational research and technologies are used to highlight both subject content and pedagogical skills. AESP specialists provide educational assemblies and classroom visits in schools participating in teacher workshops, school-sponsored and designed integrated thematic units, and NASA Aerospace Community Involvement Programs.

Education Division NASA Headquarters, Code FE 300 E Street SW Washington, DC 20546 (202) 358-1439

## **Central Operations of Resources for Educators (CORE)**

CORE was established for the National and international distribution of NASA educational materials including audiovisuals, laserdiscs, CD-ROMs, and educational software. To receive a catalog and order forms, submit written requests on school letterhead. A nominal fee includes the cost of the materials plus shipping and handling.

NASA CORE Lorain County Joint Vocational School 15181 Route 58 South Oberlin, OH 44074 (216) 774-1051, ext. 293/294 E-mail: lorjvs\_in1@leeca4.leeca.ohio.gov

## Community Involvement Program (CIP)

CIP is a unique, multidimensional service that seeks to involve not just schools, but service clubs, local government officials, and the private sector in a community-wide program that places special emphasis on the educational value of the Nation's aerospace program. CIPs are usually initiated at the request of a school administrator or State education official. Once a community has been selected, NASA officials and educators within the community meet to plan the program and its duration, which can range from one week to one month. Aerospace Education Services Program specialists usually form the core of the program, with additional NASA personnel added as needed.

While no two CIPs are alike, a typical program includes many of the elements of an education specialist's visit in an expanded format; for example, a CIP may include comprehensive inservice workshops, community exhibits, student competitions, workshops, assemblies for both students and the general public, and other public events. CIPs are extremely well received and are in great demand. Unfortunately, due to limited resources and the intensive nature of these programs, NASA conducts no more than four or five CIPs each year. To increase their chances of being chosen, smaller school districts are encouraged to contact other school districts or possibly a State education official to enlarge the geographic area to be served by the proposed program.

Education Division NASA Headquarters, Code FE 300 E Street SW Washington, DC 20546 (202) 358-1439

#### **Educational Horizons**

The newsletter *Educational Horizons* is NASA's triannual publication for educators. Each issue features information about upcoming Shuttle missions, updates on space science and aeronautics research, and information about NASA's Education Program. The newsletter, which is free by subscription to educators, also announces the latest educational publications available from NASA.

NASA Headquarters, Code FE Educational Horizons Washington, DC 20546-0001 (202) 358-1525

## **MATHCOUNTS**

This annual mathematics competition for seventh and eighth grade students brings a number of organizations together in a cooperative effort to promote excellence in mathematics. Competition begins at the local level and culminates in a National contest. NASA spon-



sors a week-long trip to the U.S. Space Camp for individual and team winners of the National competition; in addition, a three-day mathematics workshop at a NASA Field Center is awarded to the top eight coaches in the National competition.

MATHCOUNTS 1420 King Street Alexandria, VA 22314 (703) 684-2928

## NASA Educational Workshops for Elementary School Teachers (NEWEST)

NEWEST provides a two-week workshop (graduate credit optional) to elementary school teachers (grades K–6) at a NASA Field Center. The teachers participate in seminars conducted by NASA scientists and engineers, learn about current research and projects, and are provided with techniques to assist them in incorporating aerospace-related topics into their curricula. Participants receive a variety of educational materials to take back to their classrooms. The application deadline is mid-February, with selection in mid-April.

National Science Teachers Association NEWEST Program 1840 Wilson Boulevard Arlington, VA 22201-3000 (703) 243-7100

# NASA Educational Workshops for Math, Science, and Technology Teachers (NEWMAST)

NEWMAST provides mathematics, science, and technology teachers (grades 7–12) a two-week inservice workshop (graduate credit optional) at a NASA Field Center. Participants observe state-of-the-art research and development activities, interact with NASA scientists and engineers, and receive a variety of educational materials to share with their peers and students. The application deadline is mid-February with selection in mid-April.

National Science Teachers Association NEWMAST Program 1840 Wilson Boulevard Arlington, VA 22201-3000 (703) 243-7100

#### NASA Spacelink

This computer information service allows individuals to receive news about current NASA programs, activities, and other spacerelated information, including historical and astronaut data, lesson plans, classroom activities, and even entire publications. Although primarily intended as a resource for teachers, anyone with a personal computer and a modem can access the network. The Spacelink computer access number is (202) 895-0028. Users need a computer, modem,

communications software, and a long distance telephone line to access Spacelink. The service is also available through the Internet, at any of the following addresses:

http://spacelink.msfc.nasa.gov spacelink.msfc.nasa.gov 192.149.89.61

NASA Spacelink Administrator Marshall Space Flight Center Code CL01 NASA Marshall Space Flight Center Huntsville, AL 35812-001 (205) 961-1225 Spacelink Computer Access: (202) 895-0028

## NASA Educator Resource Center Network (ERCN)

Teachers can enhance their existing curricula with information that is generated by NASA programs, technologies, and discoveries. Although NASA educational materials relate primarily to mathematics, science, and technology, they can be valuable supplements for all subjects. NASA Education Division has established ERCN to disseminate materials to elementary educators, secondary educators, and higher education faculty. The materials come in various formats, including laserdiscs, CD-ROMs, videotapes, slides, audiotapes, publications, and teacher guides. Educators may preview or copy NASA materials upon request. ERCN is composed of Educator Resource Centers, Regional Educator Resource Centers, and the NASA Central Operation of Resources for Educators.

NASA Educator Resource Center Network Education Division NASA Headquarters, Code FE Washington, DC 20546-0001 (202) 554-4380

#### **NASA** Television

This distribution system for live and taped programs offers the public a front-row seat for launches and missions, as well as informational and educational programming, historical documentaries, and updates on the latest developments in aeronautics and space science. The educational programming is aimed at inspiring students to achieve, especially in science, mathematics, and technology. If a school's cable system carries NASA TV or if a school has access to a satellite dish, the programs may be downlinked and videotaped. Daily and monthly programming schedules for NASA Television are also available via NASA Spacelink, NASA Television is transmitted on Spacenet 2 (a C-band satellite) on transponder 5, channel 9, 69 degrees West longitude, frequency 3880.0 Megahertz, horizontal polarization, audio on 6.8 mHz.

NASA Television NASA Headquarters, Code P-Z 300 E Street, SW Washington, DC 20546 (202) 358-3572

## NASA ... On the Cutting Edge

This videoconference series offers teachers and students opportunities for live, interactive dialogue—by telephone and via NASA Spacelink—with NASA scientists. Conferences highlight current NASA research and technology. Participation is free. Register via mail, telephone, or e-mail.

NASA... On the Cutting Edge NASA Teaching from Space Program Oklahoma State University 308 CITD, Room A Stillwater, OK 74078-8089 (405) 744-6784 / Fax: (405) 744-6785 E-mail: NasaEduTV@smtpgate.osu. hq.nasa.gov

### Science and Engineering Fairs

To stimulate interest in aeronautics and aerospace sciences among secondary school students, NASA participates in the science fairs administered by Science Services. NASA recognizes students with outstanding projects in aeronautics, space sciences, mathematics, space technology, and applications. Participation in NASA's award program must be requested by fair directors, and NASA depends on individual science and engineering fair judges to select recipients of NASA certificates. NASA's own team of judges attend the international fair and select ten students to receive an educational trip, accompanied by their teachers, to a NASA Field Center.

Science Service 1719 N Street NW Washington, DC 20036 (202) 785-2255

## Shuttle Amateur Radio Experiment (SAREX)

With the help of Amateur Radio clubs and ham operators, astronauts on designated shuttle flights make radio contacts while in orbit. The astronauts talk directly with teachers, parents, and communities. The American Radio Relay League, the Radio Amateur Satellite Corporation, and NASA's Education Division sponsor this shuttle experiment. The American Radio Relay League can provide educators with lesson plans and resource materials.

American Radio Relay League (ARRL) 225 Main Street Newington, CT 06111 (860) 594-0200



## Space Science Student Involvement Program (SSIP)

SSIP is an annual program that allows students to compete in diverse areas related to space exploration, including the arts and sciences. Although the program culminates in a National competition, it has been designed to be used within the context of existing curricula. SSIP has five multidimensional program elements within which students may compete: one for grades 3–12, one for grades 3–5, one for grades 6–8, and two for grades 9–12. Public or private school students may apply.

National Science Teachers Association SSIP Program 1840 Wilson Boulevard Arlington, VA 22201-3000 (703) 243-7100

## Summer High School Apprenticeship Research Program (SHARP) Plus

SHARP Plus is an intensive research-based mentor program that is the residential analogue of the NASA Summer High School Apprenticeship Research Program. SHARP Plus research experiences occur in industry or in laboratories at universities that host participants on their campuses. The objective of the program is to increase underrepresented students' participation and success rates in mathematics and science precollege courses, thereby increasing the pool of underrepresented mathematics, science, and engineering majors in college, and leading to an eventual impact in the workplace. A group of 300 11th and 12th grade students with aptitude and interest in science and engineering participate in this eight-week experience.

SHARP Plus Education Division NASA Headquarters, Code FE Washington, DC 20546-0001 (202) 358-1631

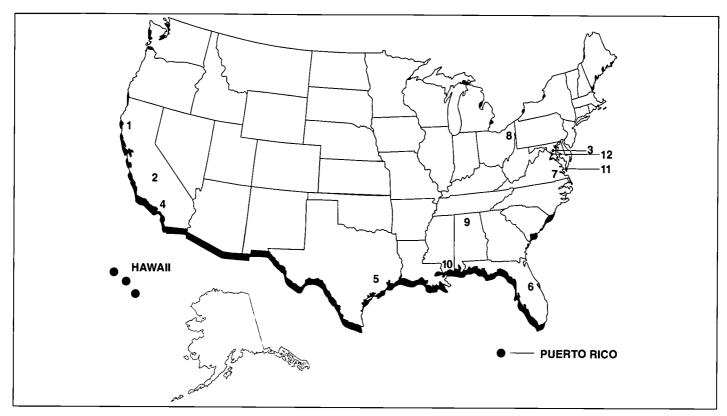
## Urban Community Enrichment Program (UCEP)

UCEP exposes teachers and middle school students from urban communities to interesting and broadening activities. Special emphasis is placed on communication, logic, and reasoning skills. Major activities include lectures, demonstrations, and structured classroom activities highlighting the various sciences that supplement the ongoing curriculum. Workshops and other activities are offered to school personnel. Technical and logistical assistance is supplied by the UCEP Coordinator. In preparation for the program, NASA Aerospace Education Specialists train a team of teachers to conduct interdisciplinary aerospace activities in school districts.

Education Division NASA Headquarters, Code FE 300 E Street SW Washington, DC 20546 (202) 358-1439



## **NASA** Headquarters and Field Centers



- 1. Ames Research Center, Moffett Field, California, contributes to the U.S. space program in the areas of space science, life sciences, and space technology.
- Dryden Flight Research Facility, Edwards Air Force Base, California, is the Nation's premier aeronautical flight test facility and the landing site for many Space Shuttle missions.
- Goddard Space Flight Center, Greenbelt, Maryland, is a unique national facility where hundreds of scientists, engineers, and technicians work together to design, develop, fabricate, test, launch, and track spacecraft; operate flight projects; and analyze data.
- Jet Propulsion Laboratory, Pasadena, California, has as its primary focus the scientific study of the solar system and the exploration of the planets with automated spacecraft.
- Lyndon B. Johnson Space Center, Houston, Texas, is the focal point for NASA's manned space flight program. Johnson has been "Mission Control" for all manned space flights since Gemini 4 in 1965.

- John F. Kennedy Space Center, Cape Canaveral, Florida, is the primary launch site for manned and unmanned space vehicles. Situated on a national wildlife refuge, it is the NASA Field Center where rockets and their payloads are inspected, prepared, and launched.
- Langley Research Center, Hampton, Virginia, focuses primarily on aeronautical research. The Center currently devotes two-thirds of its programs to aeronautics and the remainder to space research.
- Lewis Research Center, Cleveland, Ohio, conducts a varied program of research in aeronautics and space technology.
   Aeronautics research at Lewis includes work on advanced materials and structures for aircraft. Space-related research focuses primarily on power and propulsion.
- George C. Marshall Space Flight Center, Huntsville, Alabama, is the primary propulsion system center for NASA. Its rockets sent the first Americans into space, landed men on the moon, launched Skylab, and lifted the Space Shuttle into orbit.

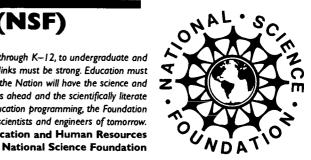
- 10. John C. Stennis Space Center, Mississippi, is NASA's prime test facility for large liquid propellant rocket engines and propulsion systems. Stennis is also responsible for research programs in environmental sciences and remote sensing of Earth's resources.
- Wallops Flight Facility, Virginia, is a special facility for suborbital research, operated by Goddard Space Flight Center.
- 12. NASA Headquarters, Washington, DC, oversees agency programs.



## **National Science Foundation (NSF)**

Education in science and mathematics involves a chain of links from preschool through K-12, to undergraduate and graduate study, and a parallel chain of informal learning experiences. All the links must be strong. Education must stimulate the interests of all students, indeed of all citizens, so as to ensure that the Nation will have the science and technology workforce—including scientists and engineers—it needs in the years ahead and the scientifically literate citizenry that our democracy will require as we enter the 21st Century. In its education programming, the Foundation reaches out to all—not just to those who may become the scientists and engineers of tomorrow.

Luther S. Williams, Directorate for Education and Human Resources



#### Mission

The National Science Foundation (NSF) was established to promote and advance scientific progress in the United States. The Foundation has a legislative mandate to initiate and support basic science and engineering research, with the dual objective of strengthening research potential and education programs at all levels. While the Foundation itself does not conduct such activities, it sponsors research and education in science and engineering.

### **Background**

NSF is an independent Federal agency, established in 1950. Policy-making authority within the agency is vested in the National Science Board, which is composed of scientists, educators, and public affairs experts. Its 25 members are appointed by the President with the consent of Congress.

NSF provides funding for research and education in the sciences and engineering. However, the Foundation does not support clinical research. Most proposals are initiated by educational institutions and other organizations rather than from individuals. More than one-half of its professional staff are scientists, engineers, and educators in these disciplines—60 percent on temporary assignment as visiting scientists and Inter-Program Assignees. These individuals oversee the disbursement of funds through seven directorates within the Foundation: Biological Sciences; Computer and Information Science and Engineering; Education and Human Resources; Engineering; Geosciences; Mathematical and Physical Sciences; and Social, Behavioral, and Economic Sciences.

## Role in Mathematics and Science Education

The National Science Foundation Act of 1950 authorizes and directs the Foundation to initiate and support education programs in virtually all fields of science and engineering, at all educational levels. The agency capitalizes on its unique ability to draw on the expertise of the science and mathematics

research and education communities. Each year, NSF submits to Congress an updated five-year strategic plan for science and engineering education. The plan simultaneously addresses short-term objectives that benefit the students currently in the system and long-term goals that result in fundamental changes to the basic delivery of education.

### **Elementary and Secondary**

NSF places a major emphasis on elementary and secondary science, mathematics, and technology education, with the objectives of attracting and sustaining the interest of all students in these fields, as well as improving the quality of instruction for all students. The Foundation is actively involved in the support of reform efforts in science and mathematics curricula that emphasize comprehensive, integrated approaches to teaching and learning. NSF's highest priority in terms of funding currently is the enhancement of teachers content and pedagogical knowledge in science, mathematics, and technology (especially at the elementary level); implementation of systemic reform at State, urban, and district levels; and implementation of science and mathematics standards for content, teaching, and student performance assessment.

#### **Higher Education**

NSF provides leadership and leveraged project support for the Nation's higher educational system of technical colleges, two- and four-year colleges, and comprehensive and research universities. NSF programs seek to engage all undergraduate students in the learning of science and mathematics—those who will be engineers and scientists or skilled technicians in our work-force; teachers of science and mathematics in our schools; leaders of business, the professions, and government; and, in every case, citizens in an increasingly technology-based society.

At the graduate level and beyond, the Foundation's activities concentrate principally in two directions:

 Support for outstanding graduate students to ensure a steady flow of high-ability students through the education and research training systems. Support for postdoctorals and young faculty to attract beginning professionals to academic careers and provide them with critical study and research opportunities in their formative years.

#### **Public Understanding of Science**

The Foundation supports projects that provide rich and stimulating environments outside of school, where individuals of all ages, interests, and backgrounds can increase their appreciation and understanding of science and mathematics and their applications. Program emphases include establishing creative linkages between formal and informal education and stimulating parental/adult involvement in, and support of, quality science, mathematics, and technology education. These projects involve broadcast, print, and film; museums and science and technology centers; zoological parks, arboreta, and aquaria; and community-based organizations.

# How Mathematics and Science Education Programs Are Administered

The Directorate for Education and Human Resources is the primary unit for education programs within NSF, and is funded by Congress through separate appropriation. All NSF research directorates, however, also engage in educational activities related to their disciplinary focus.

# Administrative Offices for Mathematics and Science Education

## Division of Educational System Reform

This division is an active partner in efforts to significantly improve learning. Focus is on high achievement in challenging science and mathematics by all students and reform of K–12 educational systems to sustain positive change in selected States, cities, and rural areas.



Luther S. Williams, Acting Director Division of Educational System Reform National Science Foundation 4201 Wilson Boulevard, Suite 875 Arlington, VA 22230 (703) 306-1690 / Fax: (703) 306-0456

## Division of Elementary, Secondary, and Informal Education (ESIE)

ESIE supports projects that enable all students—PreK-12—to succeed in science, mathematics, and technology and that increase the scientific and technological literacy of students and adults of all ages. Division programs provide the educational foundation for future generations of scientists, engineers, and technologists; for those pursuing post-secondary education in other disciplines; and for those who enter the workforce directly from secondary school. ESIE programs inform citizens about the science, math, and technology issues that impact their lives and promote effective advocacy for high-quality education in these fields.

Margaret B. Cozzens, Director Division of Elementary, Secondary & Informal Education National Science Foundation 4201 Wilson Boulevard, Suite 885 Arlington, VA 22230 (703) 306-1628 / Fax: (703) 306-0412 E-mail: mcozzen@nsf.gov

## Division of Human Resource Development (HRD)

HRD works to increase diversity in the workforce by broadening the participation of persons from underrepresented groups in science, engineering, and mathematics. Working on the precollege to graduate education levels, HRD programs focus on making comprehensive and systemic changes in the education and research training of minorities, women, and persons with disabilities.

Roosevelt Calbert, Director Division of Human Resource Development National Science Foundation 4201 Wilson Boulevard Arlington, VA 22230 (703) 306-1640 / Fax: (703) 306-0423 E-mail: rcalbert@nsf.gov

## Division of Research, Evaluation, and Communication

This division supports research, statistical studies, and evaluation of science, mathematics, engineering, and technology education in the U.S. In addition, the division prepares a biennial indicators report on all levels of science and mathematics education; supports communication of educational research results; funds projects in advanced educational technology, teaching and learning; and

provides analytical and policy support in these critical areas.

Daryl E. Chubin, Director
Division of Research, Evaluation, and
Communication
National Science Foundation
4201 Wilson Boulevard, Suite 855
Arlington, VA 22230
(703) 306-1650 / Fax: (703) 306-0434
E-mail: dchubin@nsf.gov

## Division of Undergraduate Education

This division serves as the focal point for the NSF's agency-wide effort in undergraduate education. Programs support course and curriculum development, instrumentation and laboratory improvement, undergraduate faculty enhancement, undergraduate preparation of future elementary and secondary science and mathematics teachers, and advanced technological education for the technical workforce.

Norman L. Fortenberry, Director Division of Undergraduate Education National Science Foundation 4201 Wilson Boulevard Arlington, VA 22230 (703) 306-1670 / Fax: (703) 306-0445

## National Programs for K-12 Education

## Advanced Technological Education (ATE)

The ATE program promotes exemplary improvement in advanced education through support of curriculum development and program improvement. The program targets technicians being educated for the high performance workplace of advanced technologies. Such technicians normally earn an associate degree in engineering or science technology that qualifies them for immediate employment or for transfer to a four-year institution. The program supports National/Regional Centers of Excellence in Advanced Technological Education and projects for the development of instructional materials and curriculum. The program also supports instrumentation and laboratory improvement and provides technical experiences for students and faculty and teacher development. Special projects include conferences and studies to improve understanding of issues in advanced technological education. ATE centers and projects will result in major improvements in advanced technological education, serve as models for other institutions, strengthen student preparation in mathematics and science, and yield educational products for National dissemination. All projects

must have a vision for technician education to guide project development. The ATE program is jointly managed by the Division of Undergraduate Education (DUE) and the Division of Elementary, Secondary, and Informal Education (ESIE).

Advanced Technological Education
Directorate for Education and Human
Resources
Division of Undergraduate Education
National Science Foundation
4201 Arlington Boulevard, Suite 835
Arlington, VA 22230
(703) 306-1668

## Collaboratives for Excellence in Teacher Preparation Program

This program supports projects aimed at major changes in the undergraduate preparation of future teachers of elementary and secondary science and mathematics. This includes development of new institutional structures, production of creative materials, courses and curricula for teacher education, and research on factors affecting the recruitment and preparation of teachers. Projects demonstrate leadership by the scientific discipline departments and emphasize a solid foundation in science or mathematics and rigorous attention to effective teacher practices. including the use of advanced instructional technologies. Special interests include multidisciplinary projects and initiatives for recruiting members of underrepresented groups into the teaching profession. The program encourages collaborations among scientists, science educators, teachers, and other educational leaders both in higher education and in school systems. Colleges and universities or consortia with the capacity to prepare significant numbers of highly qualified teachers are eligible to submit proposals. Smallerscale proposals for teacher education are welcome in the other programs in the Division of Undergraduate Education. These programs support course and curriculum development, undergraduate faculty enhancement activities, and laboratory equipment.

Teacher Preparation Program Division of Undergraduate Education National Science Foundation 4201 Wilson Boulevard Arlington, VA 22230 (703) 306-1668

# Comprehensive Partnerships for Mathematics and Science Achievement (CPMSA) Program

The CMPSA Program supports comprehensive precollege education reform programs aimed at city school systems. These districts link with institutions of higher education and with community-based and other educational organizations to design and implement



a combination of in-school student and teacher enhancement activities and informal education efforts. The goals are to improve student achievement in mathematics and science courses, enhance teacher knowledge and skills, and increase student interest in careers in science, mathematics, and technology.

Comprehensive Partnerships for Mathematics and Science Achievement Program Division of Human Resource Development National Science Foundation 4201 Wilson Boulevard Arlington, VA 22230 (703) 306-1633 / Fax: (703) 306-0423 E-mail: hrdpmsa@nsf.gov

## Informal Science Education (ISE) Program

ISE activities provide stimulating opportunities for individuals of all ages, interests, and backgrounds to increase their appreciation and understanding of science, mathematics, engineering, and technology. ISE projects take place outside of formal school settings in diverse environments (e.g. museums of all types, community centers, the home) and involve the use of various media (e.g. broadcast film, interactive technology, print). Projects typically are designed to reach large audiences or to have the potential for significant National or regional impact. To broaden its impact, ISE promotes collaborations among organizations that have similar goals, especially when such projects bridge the informal and formal education communities. Such partners combine their resources and expertise to develop effective strategies for reaching target audiences. In cooperation with the Instructional Materials Development Program and the Teacher Enhancement Program, ISE supports projects to increase involvement of parents and care-givers in science, mathematics, and technology education.

Informal Science Education Program Division of Elementary, Secondary, and Informal Education National Science Foundation 4201 Wilson Boulevard, Suite 885 Arlington, VA 22230 (703) 306-1616

## Instructional Materials Development (IMD) Program

IMD projects create curricula, materials, and student assessments that change classroom instruction, enabling students to acquire a sophisticated understanding of content knowledge, higher-order thinking abilities, and problem-solving skills. The materials incorporate investigative, hands-on science, math, and technology education activities and align with recently developed standards for content, teaching, and assessment. IMD-supported materials promote the success of all

students, regardless of background or ability. Another goal is the improvement of student attitudes toward science, mathematics, and technology. Projects range from major revisions of existing materials to the creation of entirely new ones; from development of a few modules at a single instructional level to comprehensive curricula for several school years; from a focus on a single subject to the integration of several disciplines; and from assessments embedded in classroom materials to the creation of assessment items and full programs that can be used by districts and States. All projects include comprehensive National dissemination plans to ensure wide use of the materials in diverse settings. In cooperation with the Teacher Enhancement Program, IMD supports implementation sites to assist districts in the selection and classroom implementation of curricula. In cooperation with the Informal Science Education Program and Teacher Enhancement, IMD also supports projects to increase the involvement of parents and caregivers in science, math, and technology education.

Instructional Materials Development Program Division of Elementary, Secondary, and Informal Education National Science Foundation 4201 Wilson Boulevard, Suite 885 Arlington, VA 22230 (703) 306-1614

# Presidential Awards for Excellence in Science and Mathematics Teaching (PAEMST) Program

The NSF operates the PAEMST Program on behalf of the White House. PAEMST recognizes career excellence for teachers at both elementary and secondary grade levels. Awards are made in each State and four jurisdictions (Washington, DC, Puerto Rico, The Department of Defense Dependent Schools and U.S. Territories [American Samoa, Guam, The Commonwealth of the Northern Marianas, and the Virgin Islands]) taken as a group. Teachers submit applications to State or jurisdiction selection committees which, in turn, select three candidates from each of the four disciplinary/grade-level award groups. These nominees are then forwarded to a National selection committee comprised of prominent scientists, mathematicians, educators, and past awardees. This committee recommends four finalists (one from each of the four disciplinary/grade-level categories) from each State and eligible jurisdiction. PAEMST teachers constitute a National network of outstanding leaders in science and mathematics education and are a rich resource for the improvement of science and mathematics education throughout the Nation.

Dr. Janice Earl
Presidential Awards for Excellence in Science
and Mathematics Teaching
Division of Elementary, Secondary, and
Informal Education
National Science Foundation
4201 Wilson Boulevard, Suite 885
Arlington, VA 22230
(703) 306-1614 / Fax: (703) 306-0412

## Programs for Persons with Disabilities

These programs are committed to helping students with disabilities participate fully in science, mathematics, engineering, and technology education and to promoting career opportunities in these disciplines for qualified people with disabilities. The programs support projects designed to change the present academic and professional climates that produce barriers to these goals. Activities include developing innovative methods of teaching science and mathematics to all students including those with disabilities and increasing the awareness and recognition of the capabilities and needs of students with disabilities among education professionals and the general public. The programs also provide mentoring resources for students with disabilities and promote the accessibility and appropriateness of instructional materials, media, and educational technologies.

Programs for Persons with Disabilities Division of Human Resource Development Directorate for Education and Human Resources

National Science Foundation 4201 Wilson Boulevard, Suite 885 Arlington, VA 22230 (703) 306-1636 / Fax: (703) 306-0423 E-mail: hrdppd@nsf.gov

#### **Programs for Women and Girls**

These programs aim to elicit projects with a high potential for increasing the representation of women in science, engineering, and mathematics careers and for improving the overall science, engineering, and mathematics education of women and girls. The initiative addresses educational issues from preschool through the graduate level, as well as professional issues. Two programs—
Implementation and Development Projects and Information Dissemination Activities for Women and Girls—accomplish these goals.

Programs for Women and Girls
Division of Human Resource Development
Directorate for Education and Human
Resources
National Science Foundation
4201 Wilson Boulevard
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(703) 306-1637 / Fax: (703) 306-0423
E-mail: hrdwomen@nsf.gov



### Rural Systemic Initiatives (RSI) Program

The RSI Program is an NSF effort to address barriers to systemic and sustainable improvements in science, mathematics, and technology education in rural, economically disadvantaged regions of the Nation. The RSI is designed to fund projects in regions defined by similarities in social, cultural, and economic circumstances, rather than by governmental boundaries. The Program supports activities that lead to formation of partnerships and coalitions as well as determination of present needs and resources and future educational goals. The RSI also supports strategies directed toward systemic educational reform. such as professional development for teachers and administrators that is aligned with National science and mathematics standards. Other goals include adaptation of high quality, challenging curricula to address cultural diversity and formulation of appropriate assessment strategies that can measure achievement in all students, regardless of socioeconomic status.

Rural Systemic Initiatives Division of Educational System Reform National Science Foundation 4201 Wilson Boulevard, Suite 875 Arlington, VA 22230 (703) 306-1684 / Fax: (703) 306-0456

## Statewide Systemic Initiatives (SSI) Program

The SSI Program is a major NSF effort to encourage improvements in science, mathematics, and engineering education through comprehensive systemic changes in the education systems for the States. The program represents a strategy to strengthen the infrastructure for science and mathematics education through alignment of State policies and resources. This requires the collaboration of educators at all levels, business and industry, parents, and the community at large. States were selected for funding through a rigorous merit review process that included preliminary proposals, panel reviews of full proposals, and site visits. Selection was based on:

- State commitment to fundamental reform of mathematics and science education;
- new directions in State vision for mathematics and science education that includes curriculum goals, assessment, teacher development, equity, governance, and improved outcomes;
- consensus on the current status of science and mathematics education and on the identification of the most serious problems that need to be addressed;

- partnerships that enable the effort to succeed:
- a plan for effective management and oversight;
- an evaluation plan that encourages midcourse corrections.

Twenty-five States and Puerto Rico received five-year awards. Two States have recently received additional five-year awards, while four completed their five-year awards. Four States have been phased out prior to completing five years of funding.

Statewide Systemic Initiatives Division of Educational System Reform National Science Foundation 4201 Wilson Boulevard, Suite 875 Arlington, VA 22230 (703) 306-1684 / Fax: (703) 306-0456

## Teacher Enhancement (TE) Program

TE projects provide professional development opportunities to broaden and deepen the disciplinary and pedagogical knowledge of teachers, improving their ability to deliver rich and challenging science, mathematics, and technology (SMT) education to all students. Through active involvement of administrators, projects develop school cultures that provide requisite resources to implement classroom improvements and sustain professional development opportunities. TE supports projects that:

- develop teachers who become leaders in content and pedagogy;
- engage teachers and students in meaningful research experiences that can be translated back to classrooms;
- provide cost-effective replication of effective projects;
- create professional development materials;
- provide innovative applications of educational technologies in networking underserved populations and giving them costeffective access to quality SMT resources and inservice training.

Emphasis is placed on projects that focus on the professional development of teachers as the primary drivers for implementing SMT education reform in entire school districts. In cooperation with the Instructional Materials Development (IMD) Program, TE will support implementation sites to assist districts in selecting and implementing NSF-supported curricula; in cooperation with the Informal Science Education Program (ISE) and IMD, TE also will support projects to increase

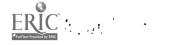
involvement of parents and caregivers in SMT education.

Teacher Enhancement Program
Division of Elementary, Secondary, and
Informal Education
National Science Foundation
4201 Wilson Boulevard, Suite 885
Arlington, VA 22230
(703) 306-1613

## Urban Systemic Initiatives (USI) Program

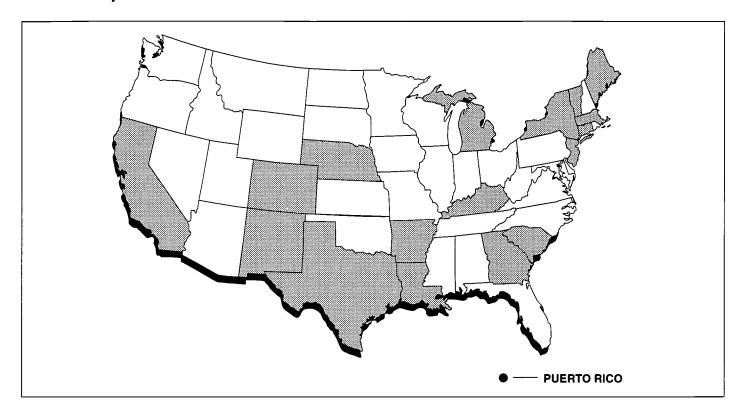
The USI Program in science, mathematics, and technology education is a comprehensive and systemic effort designed to enable fundamental reform of K-12 science and mathematics education in large urban school systems. Eligibility for the program is limited to school systems in the 25 cities having the largest numbers of school-aged children (ages 5-17) living in poverty as determined by the 1990 Census. Built upon experience gained from the Statewide Systemic Initiatives program and the Comprehensive Regional Centers for Minorities, USI provides significant support for five years to cities that have completed comprehensive planning and demonstrated readiness to make systemic and sustainable changes in the policies, practices, and procedures of urban school systems. At present, 16 of the eligible cities have received awards.

Urban Systemic Initiatives Division of Educational System Reform National Science Foundation 4201 Wilson Boulevard, Suite 875 Arlington, VA 22230 (703) 306-1684 / Fax: (703) 306-0456



## **National Science Foundation**

## **Statewide Systemic Initiatives**



The National Science Foundation established the Statewide Systemic Initiatives (SSI) Program to encourage improvement in mathematics, science, engineering, and technology education through comprehensive systemic changes in State education systems. Currently, 17 States and 1 Territory, designated on the map, have been awarded competitive grants from this program. For more information about individual State initiatives, see the State Highlights section of this publication.

## State Systemic Initiatives Grant Recipients

Arkansas	Louisiana	New Mexico
California	Maine	New York
Colorado	Massachusetts	Puerto Rico
Connecticut	Michigan	South Carolina
Georgia	Nebraska	Texas
Kentucky	New Jersey	Vermont



## **Smithsonian Institution**

Much of what the United States has achieved in the 20th century is due to its commitment to scientific inquiry and technological development. But our take-off was grounded in the preparation in science and mathematics of earlier generations of Americans. That intellectual capital is nearly spent. It is time to replenish it through investment in the education of new generations.

I. Michael Heyman, Secretary
Smithsonian Institution



#### Mission

Established to increase and diffuse knowledge, the Smithsonian Institution is a trust instrumentality of the Federal Government. While the Institution receives Federal support for its operation, it has no government or regulatory functions and serves, in effect, as an independent agency.

### **Background**

The Smithsonian Institution was founded in 1846. Although it is best known for its 14 museums and the National Zoo, the Smithsonian is also one of the country's premier research facilities. In addition to its Federally funded programs, the Institution has many privately funded activities.

## Role in Mathematics and Science Education

As part of its mandate to increase and diffuse knowledge, the Smithsonian Institution considers science education to be one of its most important missions.

## Elementary and Secondary Education

In recent years, the Institution has focused on assisting school systems in addressing the National crisis in science and mathematics education. Three areas receiving particular attention, both in the museums and in other Smithsonian bureaus, have been professional education for teachers, curriculum materials for schools, and programs to effect attitudinal changes about science.

#### **Higher Education**

Through internships and fellowships, the Institution provides individualized training in science for undergraduate and graduate students. Smithsonian programs in astrophysics and biology are especially outstanding.

#### **Public Understanding of Science**

Through educational outreach programs, the Smithsonian Institution can improve science literacy among the general public. Special exhibits, onsite demonstrations, and publications inform and educate visitors.

# How Mathematics and Science Education Programs Are Administered

Each administrative division within the Smithsonian is responsible for its own education programs, and each museum has an education office that reports to the museum director. The Institution's Office of Elementary and Secondary Education is the central office for precollege education.

# Administrative Offices for Mathematics and Science Education

## Harvard-Smithsonian Center for Astrophysics

The Smithsonian Astrophysical Observatory coordinates its varied scientific programs with the Harvard College Observatory, and together the two observatories form the Harvard-Smithsonian Center for Astrophysics in Cambridge, Massachusetts. The Science Education Department at the Center currently manages eight projects funded by the National Science Foundation (NSF) or the Annenberg Foundation, with additional support from the Smithsonian Institution. These projects use advanced technology, curricula and materials, teacher enhancement, and teacher networks to address the needs of teachers and students in elementary, secondary, and college science education.

Hal Coyle, Senior Writer Science Education Department Harvard-Smithsonian Center for Astrophysics 60 Garden Street, MS-71 Cambridge, MA 02138 (617) 495-9798 / Fax: (617) 496-5404 E-mail: hcoyle@cfa.harvard.edu

## National Air and Space Museum

This museum serves as a major educational center that the public can easily access to learn about the history and development of aeronautics, Earth and planetary sciences, astronomy, astrophysics, and related areas of the arts, humanities, and sciences. Particular

emphasis is given to the social implications of the Museum's collections and research on the quality of life for humankind.

Maureen Kerr, Assistant Director for Education Educational Services Department, MRC 305 National Air and Space Museum Washington, DC 20560 (202) 786-2524 / Fax: (202) 633-8174

## National Museum of Natural History/Museum of Man

This museum houses the world's largest and most valuable assemblage of natural history specimens and human artifacts. It is the largest research organization in the Smithsonian and has a large internship program at the college level. Through its many exhibits, educational programs, and scholarly and popular publications, the Museum disseminates knowledge about the world's natural and cultural diversity.

Laura McKie, Assistant Director for Education National Museum of Natural History 10th Street and Constitution Avenue NW, MRC 158 Washington, DC 20560

(202) 357-2066 / Fax: (202) 786-2778

#### **National Science Resources Center**

Operated jointly by the Smithsonian Institution and the National Academy of Sciences, the National Science Resources Center works to improve the teaching of science in the Nation's schools. The Center's three principal program areas are National outreach to build consensus, dissemination of information, and development of innovative science curriculum materials.

Douglas Lapp, Executive Director National Science Resources Center MRC 403 Smithsonian Institution Washington, DC 20560 (202) 357-4892 / Fax: (202) 786-2028

#### National Zoological Park

The Park maintains a living collection at the Zoo and a major conservation, animal breeding, and research facility in Virginia. Through programs in education, research, conservation, and animal health, the Park promotes under-



1 BANANA PRO STOR

standing of animal adaptations and evolution, and the interaction of wildlife with the environment and human culture. Through a series of new exhibits, programs, and graphics, the Zoo is being transformed into a biological preserve to educate the public about life in all of its forms and connections.

David Jenkins, Associate Director for Interpretive Programs National Zoo / Education Department 3001 Connecticut Avenue NW Washington, DC 20008 (202) 673-4919 / Fax: (202) 673-4746

### Office of Elementary and Secondary Education

Drawing on the collections, exhibitions, and research of the Institution's many museums and research institutes, this office brings focus and synergy to the educational work of the Smithsonian as a whole. Priorities center on building an Institution-wide publishing and information program, strengthening and coordinating the Institution's professional development programs for teachers, promoting excellence in Smithsonian educational activities through leadership and support services, and providing resources for the infusion of multicultural perspectives into Smithsonian educational programs and policies.

Ann Bay, Director Elementary and Secondary Education Smithsonian Institution Arts and Industries Building, Room 1163 Washington, DC 20560 (202) 357-2425 / Fax: (202) 357-2116 E-mail: eseem013@sivm.si.edu

### Smithsonian Environmental Research Center

The Center conducts long-term scientific research on estuarine land and water ecosystems found in the Chesapeake Bay watershed. The results of its research are disseminated through scientific journals, National and international meetings and seminars, the training of scientists, and public education activities for adults, families, and K-12 students.

A. Mark Haddon, Education Director Smithsonian Environmental Research Center PO Box 28 Edgewater, MD 21037 (301) 261-4190 / Fax: (301) 261-7954 E-mail: haddon@serc.si.edu or haddon@aol.com

### **Smithsonian Tropical Research** Institute

This institute conducts basic research on the ecology, behavior, and evolution of tropical organisms. Headquartered in Panama, the Institute carries out research throughout the tropics and is the custodian of the Barro

Colorado Nature Monument, a 12,000 acre tropical nature preserve located along the Panama Canal. Other facilities include a cloud-forest station, a research vessel, marine laboratories on the Atlantic and Pacific Oceans, and a research library.

Georgina DeAlba Smithsonian Tropical Research Institute PO Box 2072 Balboa, Republic of Panama (011) (507) 227-4918 Fax: (011) (507) 232-5978 E-mail: Stremois@sivm.si.edu

## National Programs for K-12 Education

#### **Electronic Outreach**

The Internet gives teachers immediate access to electronic versions of Smithsonian educational publications and to information about programs targeted to educators. To reach the broadest audience possible, the Smithsonian's electronic services are disseminated over an ftp server, the World Wide Web, and America Online.

Thomas Lowderbaugh Smithsonian Office of Education Smithsonian Institution Arts and Industries Building, Room1163/MRC 402 Washington, DC 20560 (202) 357-2005 / Fax: (202) 357-2116 E-mail: lowdert@soe.si.edu WWW: http://educate.si.edu/

### **National Science Resources** Center's (NSRC) Resource Collection

The NSRC maintains a comprehensive and growing collection of effective science teaching resource materials. Housed at the Arts and Industries Building of the Smithsonian Institution, the collection holds more than 5,000 volumes. It is cataloged and accessible through computerized databases that include annotations as well as bibliographic data. The Resources Center has also produced an annotated guide to elementary science resources, Resources for Teaching Elementary School Science (National Academy Press, Washington, DC). A companion volume for middle schools, Resources for Teaching Middle School Science, is under development.

Douglas Lapp, Executive Director National Science Resources Center MRC 403 Smithsonian Institution Washington, DC 20560 (202) 357-4892 / Fax: (202) 786-2028

### **NSRC Elementary Science** Leadership Institutes

These Institutes, conducted at the Institution twice each summer, provide teams of administrators, curriculum specialists, teachers, and scientists from school districts across the country with the information and skills they need to develop and maintain effective hands-on elementary science programs. The Institutes are staffed by science educators and scientists who have implemented exemplary elementary science programs in their districts. This initiative includes technical assistance to school districts across the country that are working to reform their elementary science programs.

Douglas Lapp, Executive Director National Science Resources Center MRC 403 Smithsonian Institution Washington, DC 20560 (202) 357-4892 / Fax: (202) 786-2028

#### The Private Universe Project

This project is developing a six-part Nationally broadcast television series to help science teachers address student preconceptions in science. Funded in 1992, the project focuses on grades K-12. The series is derived from work pioneered in Project STAR: Science Teaching through its Astronomical Roots, and is an extension of that project's award-winning video, A Private Universe. The project will alert science teachers to problems posed by their students' preconceived ideas and will encourage them to devise solutions tailored to students' specific needs.

Nancy Finkelstein 60 Garden Street, Mail Stop 71 Cambridge, MA 02138 (617) 496-7687 / Fax: (617) 496-7670

## **Professional Development Opportunities for Teachers**

Regional workshops and summer institutes are designed to strengthen ties between museums and schools nationwide and to contribute to the improvement of teaching methods and materials. Summer courses for teachers in the Washington, DC, area focus on using the Smithsonian as a resource for teaching and learning.

Sarita Rodriguez Office of Elementary and Secondary Education Smithsonian Institution Arts and Industries Building, Room 1163/MRC 402 Washington, DC 20560 (202) 357-3051 / Fax: (202) 357-2116



# Project SPICA: Support Program for Instructional Competency in Astronomy

Project SPICA provides astronomy education support to precollege teachers, particularly in grades K–9. The project has prepared some 180 expert teachers in 41 States to provide workshops to other teachers who want to enhance their use of astronomy in their classrooms. SPICA agents may be contacted through the project office. In addition, a manual containing 37 astronomy activities for grades 2–12, *Project SPICA: A Teacher Resource to Enhance Astronomy Education*, is available from Kendall/Hunt Publishing Company.

Judith Peritz
Harvard-Smithsonian Center for Astrophysics
60 Garden Street, MS71
Cambridge, MA 02138
(617) 496-4785 / Fax: (617) 496-5405

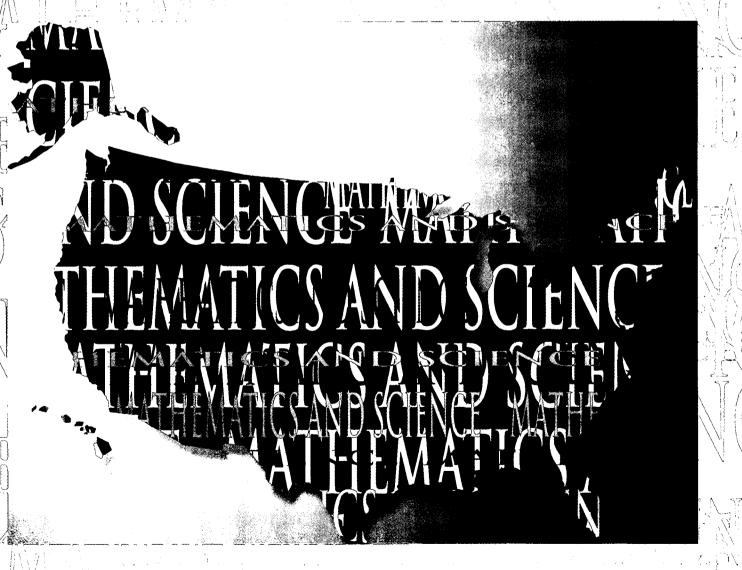
#### **Publications for Teachers**

This publications effort brings a broad range of Smithsonian resources into the Nation's classrooms and school libraries. Informational publications direct teachers to diverse Smithsonian resources and help educators plan museum visits. Curricular publications complement specific curriculum areas as articulated in the National education standards; each package contains background information and extensive activities.

Michelle Smith
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1163/MRC 402
Washington, DC 20560
(202) 786-2498 / Fax: (202) 357-2116
E-mail: eseem004@sivm.si.edu



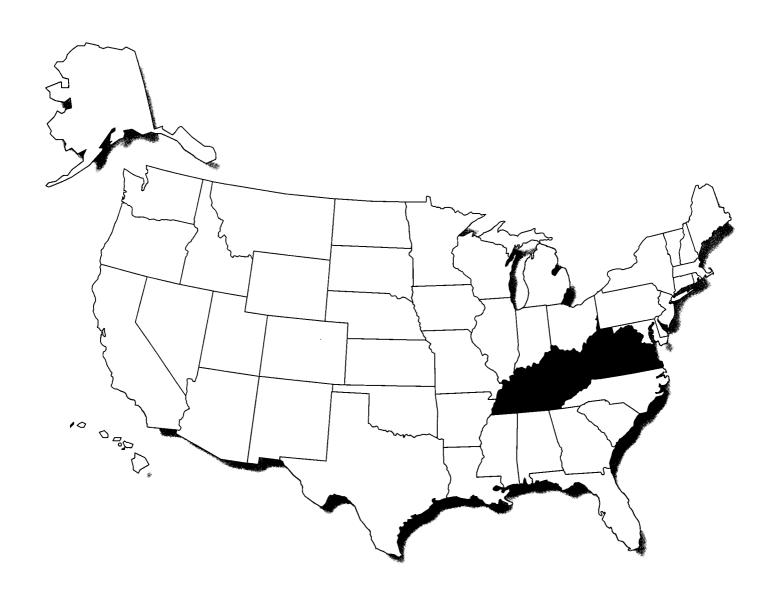
# State Highlights by Region



- **▶** Kentucky
- **▶** Tennessee
- ▶ Virginia
- ▶ West Virginia



Eisenhower Regional Math/Science Consortium at AEL





# Eisenhower Regional Math/Science Consortium at AEL



he Eisenhower Regional Math/Science Consortium at AEL (Appalachia Educational Laboratory) promotes and supports systemic reform in mathematics and science education in Kentucky, Tennessee, Virginia, and West Virginia. The Consortium builds on existing resources and creates partnerships that cut across State boundaries to link public schools, private schools, State and local education agencies, business and industry, science museums, and higher education institutions. Funded by the Eisenhower National Program for Mathematics and Science Education, the Consortium is one in a National network of 10 Consortia located across the country. The network also includes the Eisenhower National Clearinghouse (ENC) at The Ohio State University.

The Consortium's support for systemic reform in mathematics and science education includes teams of trainers in each State who are providing free onsite training designed to help align classroom instruction with National standards and State-specific curriculum frameworks.

By working closely with the Region's mathematics and science educators, the Consortium's full range of services can be tailored to State initiatives. A regional board and four State steering committees help align Consortium activities with local needs and with needs common across the Region.

The Consortium provides:

- ► Information on mathematics and science education reform, exemplary practices, standards-based activities, and the Eisenhower National Clearinghouse for Mathematics and Science Education.
- ▶ Professional development for K-12 teachers on the National education standards in mathematics and science, State curriculum frameworks, and instructional technology.
- Assistance to State departments of education in developing standards-based curriculum frameworks.
- ▶ Opportunities for networking and collaboration for mathematics and science education stakeholders in the four-State region.

- ► Technical assistance and instructional materials to schools through projects and programs recommended by State steering committees and State departments of education.
- Connections to the National Science Foundation's Appalachian Rural Systemic Initiative, operating in 66 counties across six States.

An Equity Minigrant Program sponsored by the Consortium helps classroom teachers increase opportunities for all students in the Region to attain a higher level of mathematics and science education. Grants of up to \$750 are available each year for projects designed to increase access to mathematics and science for students from traditionally underrepresented groups, including women, students with learning disabilities, students from rural areas, students from racial/ethnic/cultural minorities, students with physical disabilities, and students at risk for academic failure.

Equity minigrants can be used for various projects. For example, teachers might want to purchase materials to enhance the curriculum, bring scientists and mathematicians from traditionally underrepresented groups into classrooms to develop linkages or mentoring programs for students, provide research experiences for students from traditionally underrepresented groups, or develop school-based programs geared to increasing traditionally underserved students' interest and skills in science and mathematics.

The Consortium provides information on professional development opportunities at school sites; a newsletter entitled Charmed Particles; copies of EDTALK's What We Know About Mathematics Teaching and Learning and What We Know About Science Teaching and Learning; a proposal-writing guide entitled Increasing Student Access to Mathematics and Science: A Guide for Classroom Equity Projects; a set of classroom lessons entitled Scope It Out: Standards-Based Microscope Lessons for the Middle School; and catalogs of Appalachia Educational Laboratory products.

Dr. Pamela K. Buckley, Director

Janis Augustine, Projects Coordinator

## Kim Suiter,

Secretary

Eisenhower Regional Math/Science Consortium at AEL 1700 North Moore Street, Suite 1275 Arlington, VA 22209 (800) 624-9120 E-mail: aelinfo@ael.org WWW: http://www.ael.org/eisen

## **Kentucky**

# ► Department of Agriculture (USDA)

#### 4-H State Leader

The State 4-H Youth Development Programs are administered by the Cooperative Extension Service at land-grant universities. State 4-H leaders coordinate outreach services and training to all county offices.

Dr. Sylvester C. Umscheld, Assistant Extension Director for 4-H University of Kentucky 209 Scovell Hall Lexington, KY 40546-0064 (606) 257-5605 / Fax: (606) 257-7180

#### Ag in the Classroom State Leader

This program promotes increased understanding of agriculture and possible careers in the agricultural sciences. With National leadership provided by USDA, each State manages its own programs, with assistance from agribusiness, educational institutions, and government.

Faye Lowe Kentucky Farm Bureau 9201 Bunsen Parkway Louisville, KY 40250-0700 (502) 495-5000 / Fax: (502) 853-4114

BEST COPY AVAILABLE



Rayetta Boone Department of Agriculture 500 Mero Street, Seventh Floor Frankfort, KY 40602 (502) 564-4696 / Fax: (502) 564-6527

## ▶ Department of Education (ED)

## Appalachia Educational Laboratory, Inc. (AEL)

AEL identifies effective teaching techniques and school improvement efforts within the region and shares this information with State and local educators.

Terry L. Eidell, Executive Director Appalachia Educational Laboratory, Inc. PO Box 1348, 1031 Quarrier Street Charleston, WV 25325 (304) 347-0400 / Fax: (304) 347-0489 (800) 344-6646 (inside WV) (800) 624-9120 (outside WV)

## Eisenhower Regional Math/Science Consortium at AEL

The Eisenhower Regional Consortium provides information and technical assistance to help States and school districts improve mathematics and science education.

Pam Buckley, Director Eisenhower Math/Science Consortium at AEL 1700 North Moore Street, Suite 1275 Arlington, VA 22209 (800) 624-9120

E-mail: buckley@ael.org WWW: http://www.ael.org/eisen

#### **Eisenhower State Coordinators**

Eisenhower State Coordinators administer the Eisenhower Professional Development Program State Formula grants. The program focuses on sustained and intensive high-quality professional development through inservice programs.

John C. Drake
Eisenhower Professional Development
Program
Kentucky Department of Education
Capitol Plaza Tower, 17th Floor

Frankfort, KY 40601 (502) 564-3791./ Fax: (502) 564-6721

## **Eisenhower State Coordinators** for Higher Education

Eisenhower State Coordinators oversee the Eisenhower Professional Development State Formula Grants for the State Agency for Higher Education (SAHE). The program focuses on teacher enhancement through both inservice and preservice programs.

Wendell Cave
Eisenhower Professional Development
Program
Kentucky Council on Higher Education
1024 Capitol Center Drive, Suite 320
Frankfort, KY 40601-8204
(502) 573-1555 / Fax: (502) 573-1535

# Southeast and Islands Regional Technology in Education Consortium (SEIR\*TEC)

ED established the Regional Technology in Education Consortia (R\*TEC) program in the fall of 1995 to help States, districts, schools, adult literacy centers, and other educational institutions use advanced technology to support improved teaching and student achievement. R\*TEC's role in educational technology is unique in two ways: the emphasis is regional and the primary goal is to ensure that technology is used effectively to support school reform. Program strategies include professional development, technical assistance, and information dissemination.

Don Holznagel, Director SEIR\*TEC 41 Marietta Street NW, Suite 1000 Atlanta, GA 30303 (800) 659-3204 (404) 893-0100 / Fax: (404) 577-7812 E-mail: dholznag@serve.org

WWW: http://www.serve.org/seir-tec/

Deborah Williams, R\*TEC Project Officer U.S. Department of Education Office of Educational Research and Improvement ORAD/SLSD, Room 504f 555 New Jersey Avenue NW Washington, DC 20208-5644 (202) 219-2204 E-mail: Deborah\_Williams@ed.gov

## ▶ Department of Energy (DOE)

## Appalachian Regional Commission (ARC) and Oak Ridge National Laboratory (ORNL)

A summer science, mathematics, and technology Teacher Leadership Institute is available for secondary teachers to participate in research-based programs at ORNL. The institute is provided in a two-week summer residential format patterned after the ORNL/National Science Foundation (NSF)

National Teacher Enhancement Project and Leadership Institute. Participants are selected by the ARC from secondary schools throughout the ARC region. The focus is on "handson" laboratory research applying the tools and methods used in ongoing ORNL projects in research areas (as appropriate for each teacher's teaching assignment), pedagogy, and leadership. The program will feature telecommunications instruction at the ORNL Regional Science Center and telecommunications will be the primary method used for academic year follow-up and continued interactions with the teachers. Participants in the Teacher Leadership Institute will be hosted by several ORNL research divisions based on each teacher's background and interests. A program coordinator with experience in teacher preparation/higher education delivers instruction in pedagogy and educational leadership.

ARC and ORNL also collaborate on a summer science, mathematics, and technology Summer Science Honors Academy for ARC students to participate in research-based programs at ORNL. Student participants (seniors or graduating seniors) will be selected by the ARC from secondary schools throughout the ARC region. Students will be teamed with research mentors to participate in hands-on laboratory research applying the tools and methods used in ongoing ORNL projects. Students will also receive telecommunications instruction at the ORNL Regional Science Center.

Terry L. Lashley, Education Partnerships Team Leader Oak Ridge National Laboratory Office of University and Science Education PO Box 2008 5500A, MS 6366 Oak Ridge, TN 37831-6366 (423) 574-0689 / Fax:(423) 241-6726 E-mail: TL7@ornl.gov

## ► Department of the Interior (DOI)

## Bureau of Land Management Eastern States Office

This office provides information about educational programs, materials, and local land-management issues.

Education Coordinator Bureau of Land Management 7450 Boston Boulevard Springfield, VA 22153 (703) 440-1713



## Cumberland Gap National Historic Park

In Biodiversity: It Makes a World of Difference, the importance of biodiversity and a healthy environment are discussed. Students are also introduced to ecological concepts.

Carol Borneman, Supervisory Park Ranger Cumberland Gap National Historic Park PO Box 1848 Middlesboro, KY 40965-1848 (606) 248-2817 / Fax: (606) 248-7276

#### **Mammoth Cave National Park**

Mammoth Cave National Park offers surface and cave activities that focus on geology and natural history, as well as teacher guides, previsit materials, and guided tours. In the Environmental Education program, primary students are introduced to the importance and value of National parks. Intermediate and middle school students learn how the unique karst topography of the Mammoth Cave area affects the surface and subsurface of the area in which they live. Subjects such as biology, archaeology, and history can be connected to class curriculum when investigating the park. One-day teacher workshops are offered several times a year and pre- and post-site visits are encouraged when staff is available.

Sharon Ganci, Education Coordinator Mammoth Cave National Park Mammoth Cave, KY 42259 (502) 758-2354 / Fax: (502) 758-2349

#### **Project WILD**

Project WILD offers teacher training and educational materials. Teacher guides, free to teachers who attend the training session, contain more than 80 supplementary, interdisciplinary activities for grades K-12.

Laura Lang, Project WILD Coordinator Kentucky Department of Fish and Wildlife Resources, D.N.R. #1 Game Farm Road Frankfort, KY 40601 (502) 564-4762 / Fax: (502) 564-6508

## ► Department of Labor (DOL)

## Job Training Partnership Act (JTPA) Liaison

The JTPA Liaison can provide information about the Job Training Partnership Act State and local programs for economically disadvantaged adults and youth.

Margaret Whittet, Commissioner Department of Employment Services Kentucky Cabinet for Human Resources 275 East Main Street, Two–West Frankfort, KY 40621 (502) 564-5331 / Fax: (502) 564-7452

# ► Department of Transportation (DOT)

## Federal Aviation Administration (FAA) Aviation Education

The FAA Aviation Education Representative coordinates aviation education services, including materials and programs for the FAA in the States assigned to the region.

Programs include the following:

- ▶ The Aviation Career Education (ACE)
  Academy is a one-week summer aviation
  education program for high school students sponsored by the FAA along with a
  host educational institution. The program
  provides students with diverse experiences
  in aviation career exploration. The focus
  is on aviation career clusters identified by
  FAA, with an emphasis on opportunities
  for women and minorities. A goal is to
  have one program in each State and U.S.
  Territory. The FAA will conduct regional
  leadership workshops and provide funds
  based on the availability of resources.
- ► Aviation Education Workshops for Teachers provide teachers with information on FAA aviation programs and materials and prepare them to teach aviation in the classroom. Annual workshops are conducted at colleges and universities across the Nation. The FAA provides information, materials, and speakers for the program.
- ▶ National Congress on Aviation and Space Education is sponsored annually by the FAA in partnership with the National Aeronautics and Space Administration and the Civil Air Patrol. The meeting includes teacher workshops and crosstalk sessions to exchange ideas on promoting aerospace education.

George Burnette, ASO-17B.1, FAA Aviation Education Representative 1701 Columbia Avenue College Park, GA 30337 (404) 305-5350 / Fax: (404) 305-5312

## FAA Aviation Education Resource Centers

Located at colleges, museums, and State aviation authority offices, these centers function as information distribution centers for Federal Aviation Administration education materials and resources. The Resource Centers maintain and provide quantities of printed materials, videotapes, and computer educational software. Center personnel can also provide general information, conduct workshops, and make aviation-related presentations.

Michael Rowland Shawnee Aviation High School 4018 West Market Street Louisville, KY 40212 (502) 473-8689

# ► Environmental Protection Agency (EPA)

#### **EPA** Regional Office

This office takes part in a variety of environmental education programs for both teachers and students. Programs range from teacher workshops and student contests to in-school presentations. Information on environmental issues is also available through the Public Information Center located at the office.

Rich Nawyn, Environmental Education Coordinator Environmental Protection Agency 100 Alabama Street, SW Atlanta, GA 30303 (404) 562-8320 / Fax: (404) 562-8335

## The President's Environmental Youth Awards (PEYA) Program

Young people from each State are invited to participate in PEYA, a nationwide program designed to encourage individuals, school classes, summer camps, public interest groups, and youth organizations to promote environmental awareness and community involvement. The two components of the program are the regional certificate program and the National awards competition. Regional certificates, signed by the President, are awarded to each participant by EPA regional offices. National individual project winners, or one representative from a National awardwinning group project, along with one sponsor, are honored at EPA headquarters, Washington, DC. Interested K-12 individuals or groups may obtain application materials and contest rules by contacting the EPA Regional Office that serves their State. PEYA has been an ongoing project since it was created by the White House Office of Education and the EPA in 1971.

EPA Region 4 100 Alabama Street, SW Atlanta, GA 30303 (404) 562-8314 / Fax: (404) 562-8335



## National Aeronautics and Space Administration (NASA)

### **NASA Educator Resource Center**

The center has NASA-related educational materials in various formats, including laserdiscs, CD-ROMs, videotapes, slides, audiotapes, publications, and teacher guides. Educators may preview or copy NASA materials upon request.

Virginia Air and Space Center NASA Educator Resource Center 600 Settler's Landing Road Hampton, VA 23669-4033 (804) 727-0900, ext. 757

#### **NASA Field Centers**

Each field center has an educational programs officer who is responsible for precollege education programs. In addition to administering National programs, the center offers programs and services to meet regional and local needs.

Marchelle Canright, Center Education Program Officer NASA Langley Research Center Mail Stop 400 Hampton, VA 23681-0001 (804) 864-3313

## NASA Regional Educator Resource Center (RERC)

To offer more educators the opportunity to visit the Educator Resource Center Network (ERCN), NASA forms partnerships with planetariums, universities, museums, and other nonprofit organizations to serve as RERCs. Teachers may preview or copy NASA materials upon request.

Murray State University NASA Regional Educator Resource Center Waterfield Library Murray, KY 42071-0009 (502) 762-2850

#### **Space Grant Consortium**

The Space Grant Consortium in each State consists of colleges, universities, industry, and other organizations that have an interest in aeronautics and space education. Each consortium receives NASA funds for use in implementing a balanced program of research, education, and public service.

Kentucky Space Grant Consortium Western Kentucky University Department of Physics and Astronomy Bowling Green, KY 42101-3576 (502) 745-4156

# ► National Science Foundation (NSF)

## Statewide Systemic Initiatives (SSI) Program

Kentucky's SSI Program works in conjunction with the Department of Education and the Kentucky Science and Technology Council, Inc., to help students acquire conceptual knowledge, process and thinking skills, and scientific habits. Another major goal is to increase the number of students who enter science- and technology-related careers.

Joanne Lang, PRISM Project Director Kentucky Science and Technology Council, Inc. PO Box 1049 Lexington, KY 40588-1049 (606) 233-3502 / Fax: (606) 259-0986

## **Tennessee**

## ▶ Department of Agriculture (USDA)

#### 4-H State Leader

The State 4-H Youth Development Programs are administered by the Cooperative Extension Service at land-grant universities. State 4-H leaders coordinate outreach services and training to all county offices.

Ben T. Powell, Professor and 4-H Club Leader University of Tennessee 4-H Club Department PO Box 1071 Knoxville, TN 37901-1071 (423) 974-7434 / Fax: (423) 974-7448 E-mail: pa90628@utkum1.utk.edu

#### Ag in the Classroom State Leader

This program promotes increased understanding of agriculture and possible careers in the agricultural sciences. With National leadership provided by USDA, each State manages its own programs, with assistance from agribusiness, educational institutions, and government.

Charles Curtis Tennessee Farm Bureau PO Box 313 Columbia, TN 38402-0313 (615) 388-7872 / Fax: (615) 388-5818

## ► Department of Education (ED)

## Appalachia Educational Laboratory, Inc. (AEL)

The Regional Educational Laboratory identifies effective teaching techniques and school improvement efforts within the region and shares this information with State and local educators.

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## Eisenhower Regional Math/Science Consortium at AEL

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Pam Buckley, Director
Eisenhower Math/Science Consortium at
AEL
1700 North Moore Street, Suite 1275
Arlington, VA 22209
(800) 624-9120
E-mail: buckley@ael.org
WWW: http://www.ael.org/eisen

#### **Eisenhower State Coordinators**

Eisenhower State Coordinators administer the Eisenhower Professional Development Program State Formula grants. The program focuses on sustained and intensive high-quality professional development through inservice programs.

Barbara Adkisson, Director, Developmental Programs Eisenhower Professional Development Program Tennessee Department of Education Gateway Plaza, 8th Floor 710 James Robertson Parkway Nashville, TN 37243-0379 (615) 532-6247 / Fax: (615) 532-8536

## **Eisenhower State Coordinators** for Higher Education

Eisenhower State Coordinators oversee the Eisenhower Professional Development State Formula Grants for the State Agency for Higher Education (SAHE). The program focuses on teacher enhancement through both inservice and preservice programs.



David Ewing, Director Legal and Educational Services Eisenhower Professional Development Program Tennessee Higher Education Commission 404 James Robertson Parkway, Suite 1900 Nashville, TN 37243-0830 (615) 532-8017

# Southeast and Islands Regional Technology in Education Consortium (SEIR\*TEC)

ED established the Regional Technology in Education Consortia (R\*TEC) program in the fall of 1995 to help States, districts, schools, adult literacy centers, and other educational institutions use advanced technology to support improved teaching and student achievement. R\*TEC's role in educational technology is unique in two ways: the emphasis is regional and the primary goal is to ensure that technology is used effectively to support school reform. Program strategies include professional development, technical assistance, and information dissemination.

Don Holznagel, Director SEIR\*TEC 41 Marietta Street NW, Suite 1000 Atlanta, GA 30303 (800) 659-3204 (404) 893-0100 / Fax: (404) 577-7812 E-mail: dholznag@serve.org WWW: http://www.serve.org/seir-tec/

Deborah Williams, R\*TEC Project Officer U.S. Department of Education Office of Educational Research and Improvement ORAD/SLSD, Room 504f 555 New Jersey Avenue NW Washington, DC 20208-5644 (202) 219-2204 E-mail: Deborah\_Williams@ed.gov

## ▶ Department of Energy (DOE)

## Appalachian Regional Commission (ARC) and Oak Ridge National Laboratory (ORNL)

A summer science, mathematics, and technology Teacher Leadership Institute is available for secondary teachers to participate in research-based programs at ORNL. The institute is provided in a two-week summer residential format patterned after the ORNL/National Science Foundation (NSF) National Teacher Enhancement Project and Leadership Institute. Participants are selected

by the ARC from secondary schools throughout the ARC region. The focus is on handson laboratory research applying the tools and methods used in ongoing ORNL projects in research areas (as appropriate for each teacher's teaching assignment), pedagogy, and leadership. The program will feature telecommunications instruction at the ORNL Regional Science Center and telecommunications will be the primary method used for academic year follow-up and continued interactions with the teachers. Participants in the Teacher Leadership Institute will be hosted by several ORNL research divisions based on each teacher's background and interests. A program coordinator with experience in teacher preparation/higher education delivers instruction in pedagogy and educational leadership.

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Terry L. Lashley, Education Partnerships Team Leader Oak Ridge National Laboratory Office of University and Science Education PO Box 2008 5500A, MS 6366 Oak Ridge, TN 37831-6366 (423) 574-0689 / Fax: (423) 241-6726 E-mail: TL7@ornl.gov

## Oak Ridge Institute for Science and Education

In addition to school partnership programs, the Oak Ridge Institute for Science and Education provides student internship opportunities, research participation, teacher workshops, and summer programs for students.

Wayne Stevenson, Assistant Director
Oak Ridge Institute for Science and
Education
Science/Engineering Education Division
PO Box 117
Oak Ridge, TN 37831-0117
(423) 576-3283 / Fax:(423) 241-5219
E-mail: stevensw@orau.gov

#### Oak Ridge National Laboratory

The lab offers student science enrichment and teacher professional development both onsite and in schools, with a special focus on computer networking and communications.

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Other programs include the following:

- ▶ The Adventures in Supercomputing (AiS) program is designed to foster and enhance the participation of diverse populations of high school students in mathematics, science, and computing.
- The Ecological and Physical Sciences Study Center (EPSSC) provides inquirybased, hands-on science and mathematics activities and experiments for K-12 students and teachers. EPSSC instructors, science professionals, and educators deliver programs at the DOE's National Environmental Research Park, the ORNL Regional Science Center, the American Museum of Science and Energy, and area school classrooms. Currently the EPSSC offers more than 30 different programs. The programs are offered on a fee-for-service basis. EPSSC courses serve to supplement or enrich, not replace, existing science and mathematics curricula.
- ▶ The Nonproliferation Teacher Institute provides participants with experiences in research and curriculum development in the technical and policy aspects of global nuclear proliferation issues and nonproliferation efforts. The Institute is composed of technology briefings; laboratory research; development of a "Nonproliferation World" model, a computer moderated simulation exercise that will operate a mini-world educators can use to help build an understanding of proliferation and the dynamics associated with it; roundtable exchange; and closure report and critique.
  - The Saturday Academy of Computing and Mathematics (SACAM) is an enrichment activity for East Tennessee area high school students. The goal is to reinforce the interests of selected outstanding students who already are moving towards math/science/engineering careers and can benefit from the opportunity to work, individually or in a group, with technical mentors through a structured series of research-based learning experiences. Student participants are nominated by teachers and administrators from as many as 15 area high schools. Teachers are encouraged to participate with their students. The program is offered twice (fall and winter) during each school year. SACAM is not a lecture course, nor primarily a course in mathematics or computer science Rather, the principal subject matter is modern mathematics and highperformance computing. The approach is one of hands-on involvement with tools used to solve problems across the full range of scientific and technical disciplines.



The Teacher Research Participation Program is designed to improve the quality of precollege education by enhancing the professional competence of science and mathematics teachers. This is accomplished by involving teachers in National engineering and scientific research programs and by supporting other activities that enable teachers to interact with science and engineering professionals. Through first-hand experiences gained from full-time, eight-week summer appointments, the program provides a better understanding of how scientific knowledge is applied in the laboratory and other technical environments. The primary objective is to provide opportunities for qualified science, mathematics, and technology teachers to participate in ongoing research under the guidance of the scientific staff at the Oak Ridge facilities. Participants are assigned to positions in well-established projects and become fully integrated members of the research groups. Applicants must be certified to teach mathematics, science, or computer science, and must have taught full-time for at least one year in either public or private secondary schools serving grades 7-12.

Linda Cain, Director
Oak Ridge National Laboratory
Office of University and Science Education
PO Box 2008, Building 5500A, MS 6366
Oak Ridge, TN 37831-6366
(423) 576-3886 / Fax: (423) 241-6776
E-mail: 9LC@ornl.gov

Barbara G. Summers, Education Program Manager Oak Ridge National Laboratory Office of University and Science Education PO Box 2008, Building 5500A, MS 6366

Oak Ridge, TN 37831-6366 (423) 241-3705 / Fax: (423) 241-6776

E-mail: summersbg@ornl.gov

Peggy T. King, Program Administrator Oak Ridge National Laboratory Office of University and Science Education PO Box 2008, Building 5500A, MS 6366 Oak Ridge, TN 37831-6366 (423) 241-3653 / Fax: (423) 241-6726

Terry L. Lashley, Education Partnerships Team Leader Oak Ridge National Laboratory Office of University and Science Education PO Box 2008, Building 5500A, MS 6366 Oak Ridge, TN 37831-6366 (423) 574-0689 / Fax: (423) 241-6726 E-mail: TL7@ornl.gov

### Oak Ridge Operations Office

The Oak Ridge Operations Office provides outreach programs to local precollege schools, conducts environmental education activities, and provides information about regional programs.

Greg Mills, Education Coordinator DOE Oak Ridge Operations Office ORNL Site Office, ER-111 Oak Ridge National Laboratory Building 4500 North, MS 6269 PO Box 2008 Oak Ridge, TN 37831 (423) 576-0951 / Fax: (423) 574-9275 E-mail: millsga@ornl.gov

# ► Department of the Interior (DOI)

#### Big South Fork National River

Programs include guided nature walks, environmental camps for high school students, and teacher workshops.

Division of Interpretation Big South Fork National River Route 3, Box 401 Oneida, TN 37841 (615) 879-4890

## Bureau of Land Management Eastern States Office

This office provides information about educational programs, materials, and local land-management issues.

Education Coordinator Bureau of Land Management 7450 Boston Boulevard Springfield, VA 22153 (703) 440-1713

## **Great Smoky Mountains Institute at Tremont**

This residential youth program emphasizes exploration and appreciation of natural and cultural resources of the Great Smoky Mountains National Park. Program offerings include teacher workshops, elder hostels, and summer family and youth camps. Sessions provide environmental education on critical issues in the Smokies. There are roughly 40–50 programs offered each year.

Ken Voorhis, Director Great Smoky Mountains Institute at Tremont Route 1, Box 700 Townsend, TN 37882 (612) 448-6709 / Fax: (612) 448-9250

## Great Smoky Mountains National Park

Guided walks, lectures, and other activities offered by the Great Smoky Mountains National Park promote environmental education.

Other programs include the following:

- ➤ The Junior Ranger Program for park visitors ages 5–12 teaches about natural and cultural values of the Great Smoky Mountains National Park. The program includes an activity booklet and ranger-led activities. Upon completion of the booklet and attendance at programs, children are awarded a Junior Ranger badge.
- ► Parks as Classrooms: Smoky Mountain Classrooms provides an interdisciplinary learning experience for students in grades K\_8

Karen Ballantine, Park Ranger Great Smoky Mountains National Park 107 Park Headquarters Road Gatlinburg, TN 37738 (423) 436-1257 / Fax: (423) 436-1220

#### **Obed Wild and Scenic River**

Programs include guided nature tours and other environmental education activities.

Division of Interpretation Obed Wild and Scenic River Wartburg, TN 37887 (615) 346-6294

#### **Project WILD**

Project WILD offers teacher training and educational materials. Teacher guides, free to teachers who attend the training session, contain more than 80 supplementary, interdisciplinary activities for grades K-12.

Deborah Patton, Project WILD Coordinator Tennessee Wildlife Resources PO Box 40747 Nashville, TN 37204 (615) 781-6500 / Fax: (615) 741-4606

Karen Hanna Project WILD Coordinator Tennessee Department of Education Gateway Plaza, 8th Floor 710 James Robertson Parkway Nashville, TN 37243-0379 (615) 532-6249 / Fax: (615) 741-6236

#### **Smoky Mountain Field School**

There are one-, two-, or five-day workshops, hikes, and adventures to enhance appreciation, enjoyment, and understanding of the Smokies and the outdoors. Many courses are taught by University of Tennessee professors and emphasize field exploration. Roughly 50 program titles are offered each year.



Cheryl La Berge Smoky Mountain Field School University of Tennessee Non-Credit Community Programs 600 Henley Street, Suite 105 Knoxville, TN 37902 (615) 974-0150 (800) 284-8885

## ▶ Department of Labor (DOL)

## Job Training Partnership Act (JTPA) Liaison

The JTPA Liaison can provide information about the Job Training Partnership Act State and local programs for economically disadvantaged adults and youth.

James R. White, Commissioner Tennessee Department of Labor 501 Union Building Nashville, TN 37219 (615) 741-2582 / Fax: (615) 741-5078

## ► Department of Transportation (DOT)

## Federal Aviation Administration (FAA) Aviation Education

The FAA Aviation Education Representative coordinates aviation education services, including materials and programs for the FAA in the States assigned to the region.

Programs include the following:

- The Aviation Career Education (ACE)
  Academy is a one-week summer aviation
  education program for high school students sponsored by the FAA along with a
  host educational institution. The program
  provides students with diverse experiences
  in aviation career exploration. The focus
  is on aviation career clusters identified by
  FAA, with an emphasis on opportunities
  for women and minorities. A goal is to
  have one program in each State and U.S.
  Territory. The FAA will conduct regional
  leadership workshops and provide funds
  based on the availability of resources.
- ➤ Aviation Education Workshops for Teachers provide teachers with information on FAA aviation programs and materials and prepare them to teach aviation in the classroom. Annual workshops are conducted at colleges and universities across the Nation. The FAA provides information, materials, and speakers for the program.

▶ National Congress on Aviation and Space Education is sponsored annually by the FAA in partnership with the National Aeronautics and Space Administration and the Civil Air Patrol. The meeting includes teacher workshops and crosstalk sessions to exchange ideas on promoting aerospace education.

George Burnette, ASO-17B.1, FAA Aviation Education Representative 1701 Columbia Avenue College Park, GA 30337 (404) 305-5350 / Fax:(404) 305-5312

## FAA Aviation Education Resource Centers

Located at colleges, museums, and State aviation authority offices, these centers function as information distribution centers for Federal Aviation Administration education materials and resources. The Resource Centers maintain and provide quantities of printed materials, videotapes, and computer educational software. Center personnel can also provide general information, conduct workshops, and make aviation-related presentations.

Dr. Wallace R. Maples, Chairman Aviation Education Resource Center Middle Tennessee State University Aerospace Department East Main Street, PO Box 67 MTSU Murfreesboro, TN 37132 (615) 898-2788

# ► Environmental Protection Agency (EPA)

#### **EPA** Regional Office

This office takes part in a variety of environmental education programs for both teachers and students. Programs range from teacher workshops and student contests to in-school presentations. Information on environmental issues is also available through the Public Information Center located at the office.

Rich Nawyn, Environmental Education Coordinator Environmental Protection Agency 100 Alabama Street, SW Atlanta, GA 30303 (404) 562-8320 / Fax: (404) 562-8335

## The President's Environmental Youth Awards (PEYA) Program

Young people from each State are invited to participate in PEYA, a nationwide program designed to encourage individuals, school classes, summer camps, public interest groups, and youth organizations to promote

environmental awareness and community involvement. The two components of the program are the regional certificate program and the National awards competition. Regional certificates, signed by the President, are awarded to each participant by EPA regional offices. National individual project winners, or one representative from a National awardwinning group project, along with one sponsor, are honored at EPA headquarters, Washington, DC. Interested K-12 individuals or groups may obtain application materials and contest rules by contacting the EPA Regional Office that serves their State. PEYA has been an ongoing project since it was created by the White House Office of Education and the EPA in 1971.

EPA Region 4 100 Alabama Street, SW Atlanta, GA 30303 (404) 562-8314 / Fax: (404) 562-8335

# ► National Aeronautics and Space Administration (NASA)

#### **NASA Educator Resource Center**

The center has NASA-related educational materials in various formats, including laserdiscs, CD-ROMs, videotapes, slides, audiotapes, publications, and teacher guides. Educators may preview or copy NASA materials upon request.

U.S. Space and Rocket Center NASA Educator Resource Center for Marshall Space Flight Center PO Box 070015 Huntsville, AL 35807-7015 (205) 544-5812

#### **NASA Field Centers**

Each field center has an educational programs officer who is responsible for precollege education programs. In addition to administering National programs, the center offers programs and services to meet regional and local needs.

Jim Pruitt, Acting Director, Education Programs Office Mail Code CL01 NASA Marshall Space Flight Center Huntsville, AL 35812-0001 (205) 544-8800

### NASA Regional Educator Resource Center (RERC)

To offer more educators the opportunity to visit the Educator Resource Center Network (ERCN), NASA forms partnerships with planetariums, universities, museums, and



other nonprofit organizations to serve as RERCs. Teachers may preview or copy NASA materials upon request.

University of Tennessee at Martin NASA Regional Educator Resource Center Center for Excellence in Mathematics and Science Martin, TN 38238-5029

Martin, TN 38238-5029 (901) 587-7191/7166

### **Space Grant Consortium**

The Space Grant Consortium in each State consists of colleges, universities, industry, and other organizations that have an interest in aeronautics and space education. Each consortium receives NASA funds for use in implementing a balanced program of research, education, and public service.

Tennessee Space Grant Consortium Vanderbilt University Department of Mechanical Engineering Box 1617, Station B Nashville, TN 37235 (615) 322-2764

### **Virginia**

### Department of Agriculture (USDA)

#### 4-H State Leader

The State 4-H Youth Development Programs are administered by the Cooperative Extension Service at land-grant universities. State 4-H leaders coordinate outreach services and training to all county offices.

John Dooley, Assistant Director, 4-H Youth VPI and State University 107 Hutcheson Hall Blacksburg, VA 24061-0419 (540) 231-6371 / Fax: (540) 231-7866 E-mail: jdooley@vtvm1.cc.vt.edu

### Ag in the Classroom State Leader

This program promotes increased understanding of agriculture and possible careers in the agricultural sciences. With National leadership provided by USDA, each State manages its own programs, with assistance from agribusiness, educational institutions, and government.

Michele Awad, Virginia Farm Bureau Federation PO Box 27552 Richmond, VA 23261 (804) 784-1234

### Youth Enrichment Program

Sponsored by the Agricultural Research Service, this program provides first-hand science experience for more than 100 high school students interested in attending college and pursuing science careers.

Rosanna Taylor, Manager U.S. Department of Agriculture Office of the Administrator Special Programs, Room 3552-S 1400 Independence Avenue SW Washington, DC 20250-0301 (202) 720-3511

## ► Department of Commerce (DOC)

### Chesapeake Bay National Estuarine Research Reserve

Estuarine ecology programs are offered for all grade levels at the reserve. Reservations are required.

David Niebuhr, Education Coordinator Chesapeake Bay National Estuarine Research Reserve

Virginia Institute of Marine Science Route 1308, PO Box 1346 Gloucester Point, VA 23062 (804) 642-7135 / Fax: (804) 642-7120

### National Sea Grant College Program, Operation Pathfinder

The program consists of two-week summer courses that present an introduction to oceanographic and coastal processes.

Available in six regions, the courses are designed to enhance skills in science teaching.

Bill Hall Delaware Sea Grant 700 Pilottown Road Lewes, DE 19958 (302) 645-4253 / Fax: (302) 645-4007

## ► Department of Defense (DoD)

### Naval Base, Norfolk

The base participates in the Navy Community Service Program through formation of partnerships with schools and other youth organizations in Virginia (excluding National Capital Region), West Virginia, Maryland, Delaware, and Pennsylvania.

COMNAVBASE, Norfolk VA Commander, Naval Base Norfolk 1530 Gilbert Street, Suite 200 Code N1P Norfolk, VA 23511-2797 (804) 322-2826

## Science and Engineering Apprentice Program

This program, supported by DoD and administered by The George Washington
University, is designed to provide research experience for high school students attending school near the participating research facility. Each student works with a senior scientist or engineer who acts as a mentor for eight weeks during the summer. The following are participating organizations in the State of Virginia:

Michael Antos Naval Surface Warfare Center (NSWC-D) Code P30, Route 206 Dahlgren, VA 22448 (540) 653-8701

Dr. John Cline Army Research Laboratory Vehicle Structures Directorate (AVSD) NASA Langley Research Center Hampton, VA 23681 (804) 864-3966

Other participating organizations located in Virginia include: Army Research Institute (ARI), Alexandria, Virginia; Army Test, Measurement and Diagnostic Equipment Activity (TMDE-V), Ft. Belvoir, Virginia; Night Vision and Electronic Sensors Directorate (NVESD, Ft. Belvoir, Virginia; and Topographic Engineering Center (TEC), Ft. Belvoir, Virginia. For information on these programs, contact:

Marylin Krupsaw GWU/SEAS Science and Engineering Apprentice Program 707 22nd Street NW Washington, DC 20052 (202) 994-2234

### ▶ Department of Education (ED)

## Appalachia Educational Laboratory, Inc. (AEL)

AEL identifies effective teaching techniques and school improvement efforts within the region and shares this information with State and local educators.



Terry L. Eidell, Executive Director Appalachia Educational Laboratory, Inc. PO Box 1348, 1031 Quarrier Street Charleston, WV 25325 (304) 347-0400 / Fax: (304) 347-0489 (800) 344-6646 (inside WV) (800) 624-9120 (outside WV)

### Eisenhower Regional Math/Science Consortium at AEL

The Eisenhower Regional Consortium provides information and technical assistance to help States and school districts improve mathematics and science education.

Pam Buckley, Director
Eisenhower Math/Science Consortium at
AEL
1700 North Moore Street, Suite 1275
Arlington, VA 22209
(800) 624-9120
E-mail: buckley@ael.org
WWW: http://www.ael.org/eisen

#### **Eisenhower State Coordinators**

Eisenhower State Coordinators administer the Eisenhower Professional Development Program State Formula grants. The program focuses on sustained and intensive high-quality professional development through inservice programs.

Dr. Carol L. Rezba
Eisenhower Professional Development
Program
Virginia Department of Education
PO Box 2120
Richmond, VA 23218-2120
(804) 225-2676 / Fax: (804) 786-1703

## **Eisenhower State Coordinators** for Higher Education

Eisenhower State Coordinators oversee the Eisenhower Professional Development State Formula Grants for the State Agency for Higher Education (SAHE). The program focuses on teacher enhancement through both inservice and preservice programs.

Laura C. Ford
Eisenhower Professional Development
Program
State Council of Higher Education for
Virginia
101 North 14th Street, James Monroe
Building, 9th Floor
Richmond, VA 23219-3684
(804) 225-4416 / Fax: (804) 225-2604

# Southeast and Islands Regional Technology in Education Consortium (SEIR\*TEC)

ED established the Regional Technology in Education Consortia (R\*TEC) program in the fall of 1995 to help States, districts, schools, adult literacy centers, and other educational institutions use advanced technology to support improved teaching and student achievement. R\*TEC's role in educational technology is unique in two ways: the emphasis is regional and the primary goal is to ensure that technology is used effectively to support school reform. Program strategies include professional development, technical assistance, and information dissemination.

Don Holznagel, Director SEIR\*TEC 41 Marietta Street NW, Suite 1000 Atlanta, GA 30303 (800) 659-3204 (404) 893-0100 / Fax: (404) 577-7812 E-mail: dholznag@serve.org WWW: http://www.serve.org/seir-tec/

Deborah Williams, R\*TEC Project Officer U.S. Department of Education Office of Educational Research and Improvement ORAD/SLSD, Room 504f 555 New Jersey Avenue NW Washington, DC 20208-5644 (202) 219-2204

E-mail: Deborah\_Williams@ed.gov

## ► Department of Energy (DOE)

### Appalachian Regional Commission (ARC) and Oak Ridge National Laboratory (ORNL)

A summer science, mathematics, and technology Teacher Leadership Institute is available for secondary teachers to participate in research-based programs at ORNL. The institute is provided in a two-week summer residential format patterned after the ORNL/National Science Foundation (NSF) National Teacher Enhancement Project and Leadership Institute. Participants are selected by the ARC from secondary schools throughout the ARC region. The focus is on handson laboratory research applying the tools and methods used in ongoing ORNL projects in research areas (as appropriate for each teacher's teaching assignment), pedagogy, and leadership. The program will feature telecommunications instruction at the ORNL Regional Science Center and telecommunications will be the primary method used for academic year follow-up and continued interactions with the teachers. Participants in the Teacher Leadership Institute will be hosted by several ORNL research divisions based on each teacher's background and interests. A program coordinator with experience in

teacher preparation/higher education delivers instruction in pedagogy and educational leadership.

ARC and ORNL also collaborate on a summer science, mathematics, and technology Summer Science Honors Academy for ARC students to participate in research-based programs at ORNL. Student participants (seniors or graduating seniors) will be selected by the ARC from secondary schools throughout the ARC region. Students will be teamed with research mentors to participate in hands-on laboratory research applying the tools and methods used in ongoing ORNL projects. Students will also receive telecommunications instruction at the ORNL Regional Science Center.

Terry L. Lashley, Education Partnerships Team Leader Oak Ridge National Laboratory Office of University and Science Education PO Box 2008 5500A, MS 6366 Oak Ridge, TN 37831-6366 (423) 574-0689 / Fax: (423) 241-6726 E-mail: TL7@ornl.gov

## Thomas Jefferson National Accelerator Facility

In addition to school-year programs to motivate students and summer programs to enhance teachers, CEBAF—a Department of Energy physics research lab—shares curriculum materials, loans videotapes, and partners with the State and school districts to promote systemic improvement in precollege math and science education.

Janet H. Tyler, Science Education Manager Thomas Jefferson National Accelerator Facility 12000 Jefferson Avenue Newport News, VA 23606 (757) 269-7164 / Fax: (757) 269-5065 E-mail: tyler@cebaf.gov WWW: http://www.cebaf.gov

## ► Department of the Interior (DOI)

### **Back Bay National Wildlife Refuge**

Teacher Workshops introduce teachers to environmental education facilities, equipment, and activities available at the refuge. Teachers conduct environmental activities firsthand. Educational activities focus on refuge habitats: beach, marsh, and pond. The workshops prepare teachers for field trips with students. Hands-on environmental education activities focus on the habitat and wildlife found at the refuge.



Dean Werner, Park Ranger Back Bay NWR 4005 Sandpiper Road Virginia Beach, VA 23456 (804) 721-2412 / Fax: (804) 721-6141

### Bureau of Land Management Eastern States Office

This office provides information about educational programs, materials, and local land-management issues.

Education Coordinator Bureau of Land Management 7450 Boston Boulevard Springfield, VA 22153 (703) 440-1713

## Chincoteague National Wildlife Refuge

Programs include guided walks, environmental education activities, and teacher workshops. Teachers participating in the workshops receive teacher guides. The refuge also conducts offsite outreach programs to elder hostels, youth groups, and other interested organizations.

Other programs include the following:

- The Non-Guided Environmental Education program provides materials to groups that request fee waivers for environmental education programs.
- ► The Spring Environmental Education program allows students to study endangered species, biodiversity, and migration through pre-visit, onsite, and post-visit activities.

John D. Schroer, Refuge Manager Outdoor Recreation Planner Chincoteague National Wildlife Refuge Box 62, Maddox Boulevard Chincoteague, VA 23336 (804) 336-6122 / Fax: (804) 336-5273 E-mail: r5rw\_chnwr@mail.fws.gov

## Eastern States Bureau of Land Management

Kids' Fishing Day, an ongoing annual program, includes Pathways to Fishing, a National Educational Activity that focuses on ecology, fishing lessons, and fishing ethics. Participants also have hands-on fishing experience with local fishermen and a recreational casting game.

Geoff Walsh, Wildlife Biologist 7450 Boston Boulevard Springfield, VA 22153 (703) 440-1668 / Fax: (703) 440-1599

### Prince William Forest Park

Food Chains, Food Webs, and the Pyramid of Life are all ways of describing the flow of

energy in nature. In this program, the student learns about photosynthesis, herbivores, carnivores, and how the system interrelates to the food chain.

Other programs include:

- ▶ The Forest Succession Walk teaches students to name the five different layers of a mature forest, describe three stages of forest succession, and understand plant and animal communities.
- ► Geology of Prince William Forest Park is a program that teaches students about various rocks and minerals in the park, as well as general concepts of geology and the processes that help form the park.
- ► Hug A Tree introduces tree parts, names, and how trees benefit humans.
- ▶ The Mining and Minerals program teaches students about iron pyrite and sulfur and their importance. Other topics include how to identify a mining site, how to extract these minerals from the ground, and the effects of mining on the environment.
- Seeds: Nature's Hitch Hikers and Parachutes helps students identify some plant seeds and describe the ways in which they propagate life.
- ▶ Using the Five Senses teaches students about their five senses and the part of the body used for each sense. Students learn how animals use their senses to survive.
- ► Water Cycles, Watersheds, and Stream Ecology helps students learn about the importance of watersheds, water cycles, and why they should be protected. They learn about pollution in streams as well as about the parameters of streams and how they influence each other.

Kathy Langley, Acting Supervisor Division of Interpretation Prince William Forest Park 18100 Park Head Quarters Triangle, VA 22712 (703) 221-4706 / Fax: (703) 221-4322

## Mason Neck National Wildlife Refuge

The refuge offers environmental education workshops for teachers on- and offsite. In the Field Studies program, classes or groups can study successional grasslands and forests, wetlands, and wildlife management programs during field trips after teachers or group leaders have attended a pre-trip orientation tour. Staff may accompany adult or special needs groups for detailed discussion of management programs or to assist with access.

Teacher Workshops focus on Nationally known activity guides (Project WILD,

Aquatic Project WILD, Project Learning Tree, Wonders of Wetlands) or customized programs to meet teachers' needs for presenting environmental concepts or fulfilling the youth program curriculum.

Yvonne Schultz, Outdoor Recreation Planner Mason Neck NWR 14344 Jeff Davis Highway Woodbridge, VA 22191 (703) 690-1297 / Fax: (703) 690-8495

## Minerals Management Service (MMS) Regional Office

The MMS Regional Office provides a range of educational services. Teacher inservice programs and classroom visitations may include supplemental materials. Availability may be limited, but arrangements may be made for duplication of some materials at minimal cost.

Offshore Minerals Management Technical Communications Service Minerals Management Service 381 Eldon Street, MS 4530 Herndon, VA 20170-4817 (703) 787-1080 / Fax: (703) 787-1186

Office of Communications & Governmental Affairs

Education Coordinator Minerals Management Service 1849 C Street NW; LMS4230 Washington, DC 20240-0001 (202) 208-3985 / Fax: (202) 208-3968

#### Partnerships in Education

Partnerships are established by the United States Geological Survey (USGS) management and school administration to enhance science and math education. The programs provide feasible USGS resources, enrich school curricula, foster mentorships, and build student esteem. Partnerships are based on proximity to USGS site and availability of USGS staff.

Susan C. Wells, Bureau Volunteer Coordinator 215 National Center Reston, VA 22092 (703) 648-7452 / Fax: (703) 648-4132 E-mail: swells@usgs.gov

#### **Project WILD**

Project WILD offers teacher training and educational materials. Teacher guides, free to teachers who attend the training session, contain more than 80 supplementary, interdisciplinary activities for grades K-12.



Suzie Gilley, Project WILD Coordinator Virginia Department of Game and Inland Fisheries 4010 West Broad, PO Box 11104 Richmond, VA 23230 (804) 367-0188 / Fax: (804) 367-9147

#### Shenandoah National Park

Spring and fall workshops educate teachers about the park. Environmental education programs for students are primarily for third and fifth graders. Guided walks are available upon request.

Other programs include the following:

- ▶ Of Fields, Forests, and Streams is a program to introduce students to various habitats and what organisms need for survival. A one-day teacher workshop and pre- and post-site activities are available.
- ▶ The Variety of Life program discusses the interconnectedness and the interrelationships of the members of various communities (natural and human). A one-day teacher workshop and pre- and post-site activities are available.

Rol Hesselbart, Education and Youth Service Program Manager Shenandoah National Park Route 4, Box 348 Luray, VA 22835 (540) 999-3481 / Fax: (540) 999-3683

### **Turner Adventure Learning**

This program is an interactive distance learning program with up to three days of live broadcasting. The program has teacher training materials and is available to schools through cable or satellite link.

Gary M. Stolz, Outdoor Recreation Planner USFWS—NETC 4401 North Fairfax Drive Arlington, VA 22203 (703) 358-2504 / Fax: (703) 358-2283 E-mail: stolzg@mail.fws.gov

### U.S. Fish and Wildlife Service

A Home for Pearl is a program consisting of an instructional videotape with accompanying teacher guide designed to teach elementary school children about wildlife habitats.

Miriam Westervelt, Environmental Education Specialist U.S. Fish and Wildlife Service Division of Education PO Box 332 Waterford, VA 20197

### U.S. Geological Survey

(540) 882-3282

The programs for students and teachers include field trips, workshops, volunteer

intern positions, mentoring, shadowing, science fair judging, career fair presentations, and classroom visits. These programs are designed to present scientific content and hands-on experiences in relevant science. The focus is on teacher training and enhancement as the best way to reach more students. Programs address issues in current science education reform and the content areas of local/regional curricula. Programs are regional or local in nature and are advertised through local school systems or teacher organizations.

Teacher Resource Centers (GEO-Center, Earth Science Education Collection) provide a comprehensive, current collection of Earth science education resources to the educational community. Educational materials, including books, videos, activities, maps, posters, models, and hands-on items are available for loan to K–12 teachers and other educators involved in the teaching of the geosciences, including hydrology, meteorology, cartography, astronomy, and Earth science.

USGS Education Committee U.S. Geological Survey 116-E National Center Reston, VA 22092

## ► Department of Labor (DOL)

## Job Training Partnership Act (JTPA) Liaison

The JTPA Liaison can provide information about the Job Training Partnership Act State and local programs for economically disadvantaged adults and youth.

Dr. James E. Price, Executive Director Governor's Employment and Training Department The Commonwealth Building 4615 West Broad Street, Third Floor Richmond, VA 23230

(804) 367-9803 / Fax: (804) 367-6172

## ► Department of Transportation (DOT)

## Federal Aviation Administration (FAA) Aviation Education

The FAA Aviation Education Representative coordinates aviation education services, including materials and programs for the FAA in the States assigned to the region.

Programs include the following:

- ▶ The Aviation Career Education (ACE)
  Academy is a one-week summer aviation
  education program for high school students sponsored by the FAA along with a
  host educational institution. The program
  provides students with diverse experiences
  in aviation career exploration. The focus
  is on aviation career clusters identified by
  FAA, with an emphasis on opportunities
  for women and minorities. A goal is to
  have one program in each State and U.S.
  Territory. The FAA will conduct regional
  leadership workshops and provide funds
  based on the availability of resources.
- ▶ Aviation Education Workshops for Teachers provide teachers with information on FAA aviation programs and materials and prepare them to teach aviation in the classroom. Annual workshops are conducted at colleges and universities across the Nation. The FAA provides information, materials, and speakers for the program.
- ▶ National Congress on Aviation and Space Education is sponsored annually by the FAA in partnership with the National Aeronautics and Space Administration and the Civil Air Patrol. The meeting includes teacher workshops and crosstalk sessions to exchange ideas on promoting aerospace education.

Jim Szakary, AEA-61, FAA Aviation Education Representative JFK International Airport Federal Building, #111 Jamaica, NY 11430 (718) 553-3364 / Fax: (718) 553-1455

### FAA Aviation Education Resource Centers

Located at colleges, museums, and State aviation authority offices, these centers function as information distribution centers for Federal Aviation Administration education materials and resources. The Resource Centers maintain and provide quantities of printed materials, videotapes, and computer educational software. Center personnel can also provide general information, conduct workshops, and make aviation-related presentations.

Betty P. Wilson Aviation Education Resource Center Virginia Aviation Museum 5701 Huntsman Road Sandston, VA 23150-1946 (804) 225-3783



## ► Environmental Protection Agency (EPA)

### **EPA** Regional Office

This office takes part in a variety of environmental education programs for both teachers and students. Programs range from teacher workshops and student contests to in-school presentations. Information on environmental issues is also available through the Public Information Center located at the office.

Bonnie Smith & Nan Ides, Environmental Education Coordinators Environmental Protection Agency 841 Chestnut Street (3EA20) Philadelphia, PA 19107 (215) 566-5546 / Fax: (215) 566-5102

## The President's Environmental Youth Awards (PEYA) Program

Young people from each State are invited to participate in PEYA, a nationwide program designed to encourage individuals, school classes, summer camps, public interest groups, and youth organizations to promote environmental awareness and community involvement. The two components of the program are the regional certificate program and the National awards competition. Regional certificates, signed by the President, are awarded to each participant by EPA regional offices. National individual project winners, or one representative from a National awardwinning group project, along with one sponsor, are honored at EPA headquarters, Washington, DC. Interested K-12 individuals or groups may obtain application materials and contest rules by contacting the EPA Regional Office that serves their State. PEYA has been an ongoing project since it was created by the White House Office of Education and the EPA in 1971.

EPA Region 3 81 Chestnut Street (3EA20) Philadelphia, PA 19107 (215) 566-5543 / Fax: (215) 566-5102

### ► National Aeronautics and Space Administration (NASA)

### **NASA Educator Resource Center**

The center has NASA-related educational materials in various formats, including laserdiscs, CD-ROMs, videotapes, slides, audiotapes, publications, and teacher guides. Educators may preview or copy NASA materials upon request.

Virginia Air and Space Center NASA Educator Resource Center 600 Settler's Landing Road Hampton, VA 23669-4033 (804) 727-0900, ext. 757

Wallops Flight Facility NASA Education Complex—Visitor Center Building J-17 Wallops Island, VA 23337-5099 (804) 824-2297 or 824-2298

#### **NASA Field Centers**

Each field center has an educational programs officer who is responsible for precollege education programs. In addition to administering National programs, the center offers programs and services to meet regional and local needs.

Marchelle Canright Center Education Program Officer NASA Langley Research Center, MS 400 Hampton, VA 23681-0001 (804) 864-3313

Keith Koehler Public Affairs Office Wallops Flight Facility Wallops Island, VA 23337 (804) 824-1579

### NASA Regional Educator Resource Center (RERC)

To offer more educators the opportunity to visit the Educator Resource Center Network (ERCN), NASA forms partnerships with planetariums, universities, museums, and other nonprofit organizations to serve as RERCs. Teachers may preview or copy NASA materials upon request.

Radford University NASA Regional Educator Resource Center PO Box 6999 Walker Hall Radford, VA 24142 (703) 831-6284

### **Space Grant Consortium**

The Space Grant Consortium in each State consists of colleges, universities, industry, and other organizations that have an interest in aeronautics and space education. Each consortium receives NASA funds for use in implementing a balanced program of research, education, and public service.

Virginia Space Grant Consortium 2713-D Magruder Boulevard Hampton, VA 23666 (804) 865-0726

### West Virginia

### ▶Department of Agriculture (USDA)

#### 4-H State Leader

The State 4-H Youth Development Programs are administered by the Cooperative Extension Service at land-grant universities. State 4-H leaders coordinate outreach services and training to all county offices.

Dr. Mary McPhall Gray, Division Leader Family and Youth Program West Virginia University PO Box 6031, 619 Knapp Hall Morgantown, WV 26506-6031 (304) 293-2694 / Fax: (304) 293-7599 E-mail: u4aac@wvnvm.wvnet.edu

### Ag in the Classroom State Leader

This program promotes increased understanding of agriculture and possible careers in the agricultural sciences. With National leadership provided by USDA, each State manages its own programs, with assistance from agribusiness, educational institutions, and government.

William Aiken West Virginia Farm Bureau 1 Red Rock Road Buckhannon, WV 26201 (304) 472-2080 / Fax: (304) 472-6554

### Youth Enrichment Program

Sponsored by the Agricultural Research Service, this program provides first-hand science experience for more than 100 high school students interested in attending college and pursuing science careers.

Rosanna Taylor, Manager U.S. Department of Agriculture Office of the Administrator Special Programs, Room 3552-S 1400 Independence Avenue SW Washington, DC 20250-0301 (202) 720-3511

## ► Department of Education (ED)

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### Eisenhower Regional Math/Science Consortium at AEL

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1700 North Moore Street, Suite 1275
Arlington, VA 22209
(800) 624-9120
E-mail: buckley@ael.org
WWW: http://www.ael.org/eisen

### **Eisenhower State Coordinators**

Eisenhower State Coordinators administer the Eisenhower Professional Development Program State Formula grants. The program focuses on sustained and intensive high-quality professional development through inservice programs.

Eisenhower Professional Development Program West Virginia Department of Education 1900 Kanawha Boulevard East, Room B-252 Charleston, WV 25305 (304) 558-7805 / Fax: (304) 558-0048

David M. Porterfield

## **Eisenhower State Coordinators** for Higher Education

Eisenhower State Coordinators oversee the Eisenhower Professional Development State Formula Grants for the State Agency for Higher Education (SAHE). The program focuses on teacher enhancement through both inservice and preservice programs.

Dr. Donald C. Darnton
Eisenhower Professional Development
Program
West Virginia State College
Department of Business
Institute, WV 25112
(304) 766-3094/3192 / Fax: (304) 768-9842

# Southeast and Islands Regional Technology in Education Consortium (SEIR\*TEC)

ED established the Regional Technology in Education Consortia (R\*TEC) program in the fall of 1995 to help States, districts, schools, adult literacy centers, and other educational institutions use advanced technology

to support improved teaching and student achievement. R\*TEC's role in educational technology is unique in two ways: the emphasis is regional and the primary goal is to ensure that technology is used effectively to support school reform. Program strategies include professional development, technical assistance, and information dissemination.

Don Holznagel, Director SEIR\*TEC 41 Marietta Street NW, Suite 1000 Atlanta, GA 30303 (800) 659-3204 (404) 893-0100 / Fax: (404) 577-7812 E-mail: dholznag@serve.org WWW: http://www.serve.org/seir-tec/

Deborah Williams, R\*TEC Project Officer U.S. Department of Education Office of Educational Research and Improvement ORAD/SLSD, Room 504f 555 New Jersey Avenue NW Washington, DC 20208-5644 (202) 219-2204 E-mail: Deborah\_Williams@ed.gov

## ► Department of Energy (DOE)

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Terry L. Lashley, Education Partnerships Team Leader Oak Ridge National Laboratory Office of University and Science Education PO Box 2008 5500A, MS 6366 Oak Ridge, TN 37831-6366 (423) 574-0689 / Fax: (423) 241-6726 E-mail: TL7@ornl.gov

### Morgantown Energy Technology Center

In addition to guided tours and field trips, the center manages teacher workshops and a speakers' bureau, loans instructional materials to Teacher Research Associates Program participants and local educators, and sponsors a regional Science Bowl.

Larry Headley Morgantown Energy Technology Center PO Box 880 Morgantown, WV 26507-0880 (304) 285-4314 / Fax: (304) 285-4292 E-mail: lheadle@metc.doe.gov

### Department of the Interior (DOI)

## **Bureau of Land Management Eastern States Office**

This office provides information about educational programs, materials, and local land-management issues.

Education Coordinator Bureau of Land Management 7450 Boston Boulevard Springfield, VA 22153 (703) 440-1713

### Harpers Ferry National Historic Park

The Marsh Walk program explores an often misunderstood natural resource, the wetland.



Marsha Starkey, Education Specialist Harpers Ferry NHP PO Box 65 Harpers Ferry, WV 25425 (304) 535-6748 / Fax: (304) 535-6749

### **New River Gorge National River**

Programs are requested by teachers and other youth group leaders from a list of 10 in-park programs offered at six locations or 11 offsite programs. Each is designed to offer a handson experience that complements State learner outcomes, and to promote a sense of responsibility for protecting the park and the environment as a whole. Programs include guided walks and lectures on the history, geology, and ecology of the New River Gorge National River. A teacher guide is available.

In the park's curriculum-based Environmental Education Program, a park ranger visits each K-4 classroom in participating schools in both the fall and spring to present a one-to two-hour program of activities centering on a grade-specific environmental or cultural theme.

Warren Snyder, Chief Interpretation and Visitor Services New River Gorge National River PO Box 246 Glen Jean, WV 25846 (304) 465-0508 / Fax: (304) 465-0591

#### **Project WILD**

Project WILD offers teacher training and educational materials. Teacher guides, free to teachers who attend the training session, contain more than 80 supplementary, interdisciplinary activities for grades K-12.

Art Shomo, Project WILD Coordinator Division of Natural Resources 1900 Kanawha Boulevard, East Charleston, WV 25305 (304) 558-2771 / Fax: (304) 558-3147

### ▶Department of Labor (DOL)

## Job Training Partnership Act (JTPA) Liaison

The JTPA Liaison can provide information about the Job Training Partnership Act State and local programs for economically disadvantaged adults and youth.

Andrew N. Richardson, Commissioner West Virginia Bureau of Employment Programs Job Training Programs Division 112 California Avenue, Room 610 Charleston, WV 25305-0112 (304) 558-2630 / Fax: (304) 558-2992

## ► Department of Transportation (DOT)

## Federal Aviation Administration (FAA) Aviation Education

The FAA Aviation Education Representative coordinates aviation education services, including materials and programs for the FAA in the States assigned to the region.

Programs include the following:

- ▶ The Aviation Career Education (ACE)
  Academy is a one-week summer aviation
  education program for high school students sponsored by the FAA along with a
  host educational institution. The program
  provides students with diverse experiences
  in aviation career exploration. The focus
  is on aviation career clusters identified by
  FAA, with an emphasis on opportunities
  for women and minorities. A goal is to
  have one program in each State and U.S.
  Territory. The FAA will conduct regional
  leadership workshops and provide funds
  based on the availability of resources.
- Aviation Education Workshops for Teachers provide teachers with information on FAA aviation programs and materials and prepare them to teach aviation in the classroom. Annual workshops are conducted at colleges and universities across the Nation. The FAA provides information, materials, and speakers for the program.
- ▶ National Congress on Aviation and Space Education is sponsored annually by the FAA in partnership with the National Aeronautics and Space Administration and the Civil Air Patrol. The meeting includes teacher workshops and crosstalk sessions to exchange ideas on promoting aerospace education.

Jim Szakary, AEA-61 FAA Aviation Education Representative JFK International Airport Federal Building, #111 Jamaica, NY 11430 (718) 553-3364 / Fax: (718) 553-1455

## FAA Aviation Education Resource Centers

Located at colleges, museums, and State aviation authority offices, these centers function as information distribution centers for Federal Aviation Administration education materials and resources. The Resource Centers maintain and provide quantities of printed materials, videotapes, and computer educational software. Center personnel can also provide general information, conduct workshops, and make aviation-related presentations.

Dr. Ronald Ohl, President Aviation Education Resource Center Salem-Teikyo University 223 West Main Street Salem, WV 26426 (304) 782-5234

## ► Environmental Protection Agency (EPA)

### **EPA Regional Office**

This office takes part in a variety of environmental education programs for both teachers and students. Programs range from teacher workshops and student contests to in-school presentations. Information on environmental issues is also available through the Public Information Center located at the office.

Bonnie Smith and Nan Ides, Environmental Education Coordinators Environmental Protection Agency 841 Chestnut Street (3EA20) Philadelphia, PA 19107 (215) 566-5546 / Fax: (215) 566-5102

## The President's Environmental Youth Awards (PEYA) Program

Young people from each State are invited to participate in PEYA, a nationwide program designed to encourage individuals, school classes, summer camps, public interest groups, and youth organizations to promote environmental awareness and community involvement. The two components of the program are the regional certificate program and the National awards competition. Regional certificates, signed by the President, are awarded to each participant by EPA regional offices. National individual project winners, or one representative from a National awardwinning group project, along with one sponsor, are honored at EPA headquarters, Washington, DC. Interested K-12 individuals or groups may obtain application materials and contest rules by contacting the EPA Regional Office that serves their State. PEYA has been an ongoing project since it was created by the White House Office of Education and the EPA in 1971.

EPA Region 3 81 Chestnut Street (3EA20) Philadelphia, PA 19107 (215) 566-5543 / Fax: (215) 566-5102



8 79

# ► National Aeronautics and Space Administration (NASA)

#### **NASA Educator Resource Center**

The center has NASA-related educational materials in various formats, including laserdiscs, CD-ROMs, videotapes, slides, audiotapes, publications, and teacher guides. Educators may preview or copy NASA materials upon request.

Virginia Air and Space Center NASA Educator Resource Center 600 Settler's Landing Road Hampton, VA 23669-4033 (804) 727-0900, ext. 757

#### **NASA Field Centers**

Each field center has an educational programs officer who is responsible for precollege education programs. In addition to administering National programs, the center offers programs and services to meet regional and local needs.

Marchelle Canright, Center Education Program Officer NASA Langley Research Center Mail Stop 400 Hampton, VA 23681-0001 (804) 864-3313

### NASA Regional Educator Resource Center (RERC)

To offer more educators the opportunity to visit the Educator Resource Center Network (ERCN), NASA forms partnerships with planetariums, universities, museums, and other nonprofit organizations to serve as RERCs. Teachers may preview or copy NASA materials upon request.

Wheeling Jesuit College NASA Regional Educator Resource Center 316 Washington Avenue Wheeling, WV 26003 (304) 243-2388

### **Space Grant Consortium**

The Space Grant Consortium in each State consists of colleges, universities, industry, and other organizations that have an interest in aeronautics and space education. Each consortium receives NASA funds for use in implementing a balanced program of research, education, and public service.

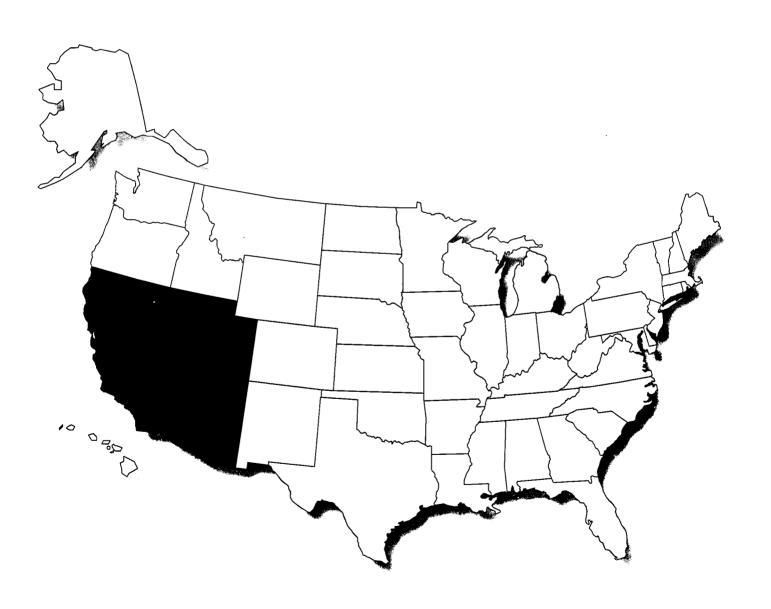
West Virginia Space Grant Consortium West Virginia University, Evansdale Campus Engineering Research Building, Room 108A Morgantown, WV 26506-6101 (304) 293-4099



- ► Arizona
- **▶** California
- ► Nevada
- **▶** Utah

Far West Region

WestEd Eisenhower Regional Consortium for Science and Mathematics Education





# WestEd Eisenhower Regional Consortium for Science and Mathematics Education



The WestEd Eisenhower Regional Consortium for Science and Mathematics Education (WERC), a program of the WestEd Regional Educational Laboratory, has served the Far West region since October, 1992. WERC is a member of the National Network of Eisenhower Regional Consortia and the Eisenhower National Clearinghouse for Mathematics and Science Education. The mission of this network is to serve as a coordinated field-based National infrastructure for systemic development and dissemination, with an emphasis on underserved and underrepresented populations.

Each of the 10 Regional Consortia serves the States within its geographical region to promote systemic reform in science and mathematics education. Systemic reform aims to simultaneously address the various factors that contribute to the current condition of science and mathematics education. On a State level, this includes curriculum frameworks, grade-level assessments, and teacher preservice and inservice programs. WestEd works with States to develop world-class standards, to help align curriculum frameworks with world-class standards, and to match statewide assessment methods with these standards and reform frameworks.

### Arizona

Consortium staff have worked with the Arizona Department of Education to develop a curriculum alignment program to assist schools in meeting the goals of the Arizona Essential Skills in mathematics and science. Consortium staff also helped design and implement the summer Arizona Academy for Systemic Reform of Mathematics and Science and the subsequent Journey Schools Program. WERC staff also provide technical assistance to Arizona systemic reform efforts such as the Phoenix area Urban Systemic Initiative and the Arizona Coalition members of the area's UCAN Rural Systemic Initiative. The technical assistance for the Urban Systemic Initiative has had a focus on teacher action research projects and is developing a new focus on telecommunications.

#### California

California is the only State in WestEd's region
as received funding from the National

Science Foundation's Statewide Systemic Initiative (SSI). WERC collaborates with the State's SSI to help coordinate science education efforts throughout the State. Together they have established the California Science Education Advisory Committee (CSEAC), which is currently leading the effort to develop California Challenge Science Education Standards. This statewide effort utilizes electronic communications to assist in the development, review, and dissemination of the new standards. Another major CSEAC initiative is focusing on the implementation of science performance assessments statewide. In the spring of 1996, more than 20,000 students engaged in performance tasks as part of this initiative.

The Science Education Academy of the Bay Area (SEABA) provides an example of the networking and collaboration model for enhanced systemic reform. Charter members of SEABA include 10 county offices of education, four University of California campuses, the Lawrence Hall of Science, four California State University campuses, WestEd, the California Department of Education, the Exploratorium, the California Academy of Sciences, Public Broadcasting Station KQED, and four U.S. Department of Energy laboratories. A SEABA goal from its inception has been the production and dissemination of a "one-stop shopping catalog" of greater Bay Area programs and resources. This electronic catalog provides accurate up-to-date information about science education resources and continuing education opportunities available to educators in the greater Bay Area. Teachers and resource providers can search the catalog by organization name, subject area, type of activity, date range, geographic location, and other search criteria. A companion journal. printed in magazine format, provides teachers with an overview of Bay Area professional development activities, highlights selected SEABA activities, encourages teachers to continue their education in science, and helps them use the electronic catalog.

### Nevada

Work at the State level has focused on building an electronic network called the Nevada Public School Network. This telecommunications network enables K-12 teachers to directly access the Internet. WestEd has provided necessary funds for the distributed file servers

needed to operate the network and facilitate the organization and functioning of a statewide task force to make and implement both short-term and long-term plans. Currently, WERC efforts in Nevada are focusing on the development of a new *Nevada Science Framework* that embodies content and performance standards. In addition, WERC staff provide technical assistance in a variety of professional development settings supporting mathematics and science education.

#### Utah

Work in Utah focuses on revising and implementing the science framework. Revision of the core curriculum initially focused on K-6 and expanded to grades 7-12. WERC participated in writing and revising the new core, integrating authentic assessment instruments aligned with the core content and philosophy, piloting the use of the core in selected schools, and disseminating the revised core to a much wider audience in Utah. After the Utah Board of Education adopted both revised cores, efforts have focused on supporting the professional development to assist teachers and schools in implementing the new ways of teaching science at the elementary and secondary levels. A key philosophical underpinning of the science core revisions is a departure from instruction based on isolated facts toward an integrated instructional program that highlights the processes of science and the big ideas in science and their connections. The revised secondary science core includes a new ninth grade Earth Systems Science course. WERC staff are assisting Utah educators in developing helpful resources for teachers and students, especially a site on the World Wide Web specifically geared to supporting this course.

### **Consortium Services**

The Regional Consortia have a special role in identifying and disseminating exemplary curricular materials, teaching methods, teacher training programs, and assessment tools. WERC helps identify exemplary materials developed within its region to be disseminated by the Consortium and by the Eisenhower National Clearinghouse (ENC). In addition, WERC plays a central role in the dissemination of information from the Clearinghouse to schools and teachers in its four States, WERC.

**BEST COPY AVAILABLE** 

in collaboration with ENC, has set up a Demonstration Site in the California Academy of Sciences located in San Francisco's Golden Gate Park. This collaboration is now being extended through the establishment of one or more ENC Access Centers in each State.

At the local level, the Consortium provides technical assistance that teaches classroom teachers, administrators, and other educators to adapt and use exemplary instructional materials, teaching methods, curricula, and assessment tools. Since the WestEd Eisenhower Regional Consortium has a limited budget to serve a very large area in terms of both population and geography, it is focusing its training efforts on working with existing staff development networks. The Consortium's training and information services aim to facilitate the efforts of the many agencies that themselves reach out into all the schools in the region.

WestEd provides significant resources and assistance with respect to the uses of technology to support improvements in mathematics and science education. The development, printing, and distribution of the acclaimed book *Tales from the Electronic Frontier* illustrate WERC's approach to the uses of technology to support education reform. *Tales* features nine stories of how practicing teachers use the Internet for the active learning of mathematics and science. Each story raises challenging issues that arise in instructional settings. In addition, *Tales* provides valuable resources, tips, and ideas to help both Internet novices and those with more experience.

The WestEd Governing Board oversees the activities of the WestEd Eisenhower Regional Consortium. The Governing Board has 33 active members from all four States, including Chief State School Officers, local school administrators, representatives from higher education, county superintendents of schools, representatives from State offices of education, representatives from private schools, and members of the business community.

Dr. Art Sussman, WERC Co-Director

**Dr. Steve Schneider,** WERC Co-Director

**Dr. Tania Madfes,**Director, Science Education Academy of the Bay Area

Dr. Sharon Nelson-Barber, Equity, Evaluation Specialist

**Dr. Jerome Shaw,** Science Specialist

Ann Muench, Mathematics Specialist

#### Richard Wenn,

Communications Specialist

Libby Rognier, Research Associate

Mayumi Shinohara, Research Associate

Kirsten Daehler, Research Associate

Roberto Carlos, Research Assistant

Billy Trimble, Research Assistant

Sally King, Administrative Assistant

WestEd Eisenhower Regional Consortium for Science and Mathematics Education 730 Harrison Street San Francisco, CA 94107-1242 (415) 241-2730 / Fax: (415) 241-2746 WWW: http://www.wested.org/werc/

### **Arizona**

## ► Department of Agriculture (USDA)

### 4-H State Leader

The State 4-H Youth Development Programs are administered by the Cooperative Extension Service at land-grant universities. State 4-H leaders coordinate outreach services and training to all county offices.

Dr. William Peterson, Assistant Director Arizona 4-H Youth Development University of Arizona Forbes 315 Tucson, AZ 85719 (602) 621-7205 / Fax: (602) 621-1314 E-mail: bpeters@ccit.arizona.edu

### Ag in the Classroom State Leader

This program promotes increased understanding of agriculture and possible careers in the agricultural sciences. With National leadership provided by USDA, each State manages its own programs, with assistance from agribusiness, educational institutions, and government.

Deborah Flowers 3401 East Elwood Street Phoenix, AZ 85040-1625 (602) 470-0088 / Fax: (602) 470-0178

## ► Department of Defense (DoD)

### Naval Base, San Diego

The base participates in the Navy Community Service Program through formation of partnerships with schools and other youth organizations throughout Southern California, Arizona, Hawaii, and Nevada.

COMNAVBASE, San Diego CA Commander, Naval Base 937 North Harbor Drive Code 012 San Diego, CA 92132-5100 (619) 532-1514

### ▶ Department of Education (ED)

#### **Eisenhower State Coordinators**

Eisenhower State Coordinators administer the Eisenhower Professional Development Program State Formula grants. The program focuses on sustained and intensive high-quality professional development through inservice programs.

Sharon Bolster, State Coordinator Eisenhower Professional Development Program Arizona Department of Education 1535 West Jefferson Street Phoenix, AZ 85007 (602) 542-2147 / Fax: (602) 542-3100

## Eisenhower State Coordinators for Higher Education

Eisenhower State Coordinators oversee the Eisenhower Professional Development State Formula Grants for the State Agency for Higher Education (SAHE). The program focuses on teacher enhancement through both inservice and preservice programs.

Paul Tweeten
Eisenhower Professional Development
Program
Arizona Board of Regents
2020 North Central Avenue, Suite 230
Phoenix, AZ 85004
(520) 229-2961 / Fax: (520) 523-7953

# Pacific and Southwest Regional Technology in Education Consortium (PSR\*TEC)

ED established the Regional Technology in Education Consortia (R\*TEC) program in the fall of 1995 to help States, districts, schools, adult literacy centers, and other educational institutions use advanced technology



to support improved teaching and student achievement. R\*TEC's role in educational technology is unique in two ways: the emphasis is regional and the primary goal is to ensure that technology is used effectively to support school reform. Program strategies include professional development, technical assistance, and information dissemination.

Kevin Rocap, Director
PSR\*TEC
Center for Language Minority Education and
Research
c/o College of Education
California State University, Long Beach
1250 Bellflower Boulevard
Long Beach, CA 90840-2201
(310) 985-1570 / Fax: (310) 985-4528
E-mail: krocap@csulb.edu
WWW: http://www.csulb.edu/~clmer/
pswrtc/pswrtc.html

Neal Kaske
R\*TEC Project Officer
U.S. Department of Education
Office of Educational Research and
Improvement
Office of Library Programs, Room 300h
555 New Jersey Avenue NW
Washington, DC 20208-5571
(202) 219-1871
E-mail: nkaske@inet.ed.gov

# WestEd Eisenhower Regional Consortium for Science and Mathematics Education

The Eisenhower Regional Consortium provides information and technical assistance to help States and school districts improve mathematics and science education.

Art Sussman and Steve Schneider, Co-Directors WestEd Eisenhower Regional Consortium for Science and Mathematics Education 730 Harrison Street San Francisco, CA 94107-1242 (415) 565-3000 / Fax: (415) 241-2746 WWW: http://www.wested.org/werc/

## WestEd Regional Educational Laboratory

WestEd identifies effective teaching techniques and school improvement efforts within the region and shares this information with State and local educators.

Dean H. Nafziger, Executive Director WestEd Regional Educational Laboratory 730 Harrison Street San Francisco, CA 94107-1242 (415) 565-3000 / Fax: (415) 565-3012

## ► Department of Energy (DOE)

### Western Area Power Administration (WAPA)

The Western Area Power Admininstration conducts the Regional Science Bowl, an academic competition sponsored by DOE and the community. Held each February, it encourages the study of science and mathematics and the pursuit of related careers. The regional winner advances to the National Competition, held each spring in Washington, DC.

Kevin Petts
Western Area Power Administration—
Phoenix
PO Box 6457
615 South 43rd Avenue
Phoenix, AZ 85005
(602) 352-2770 / Fax: (602) 352-2454

## ► Department of the Interior (DOI)

### **Bureau of Land Management State Office**

This office participates in the Color Country Nature Camp Program for students and provides information about educational programs, materials, and local land-management issues. Information is also available on facilities such as the Dankworth Pond Outdoor Learning Center and the San Pedro Riparian National Conservation Area.

Rem Hawes, Education Coordinator Office of External Affairs Bureau of Land Management 3707 North Seventh Street PO Box 16563 Phoenix, AZ 85011 (602) 650-0404

#### **Chiricahua National Monument**

The program What's a Chiricahua? introduces students to the many unique animals found in the monument.

Suzanne Moody, Environmental Education Coordinator Chiricahua National Monument Dos Cabezas Rt. Box 6500 Willcox, AZ 85643 (602) 824-3560 / Fax: (602) 824-3421

### **Hoover Dam**

In addition to tours of the Hoover Dam, visitors can explore interpretive exhibits about the environment.

Bob Walsh Public Affairs Office Hoover Dam LCD-140 PO Box 427 Boulder City, NV 89005 (702) 293-8421

### Glen Canyon Dam

Guided and self-guided tours of the dam are available to school groups. Brochures in Braille and headphones are also available for individuals who are visually impaired.

Jayne Kelleher Public Affairs Office Upper Colorado Region Bureau of Reclamation PO Box 11568 (UC-140) Salt Lake City, UT 84147-0568 (801) 524-6039

### Imperial National Wildlife Refuge

The refuge offers a variety of outreach and onsite environmental education activities for students of all ages.

Imperial National Wildlife Refuge PO Box 72217 Martinez Lake, AZ 85365 (602) 783-3371 / Fax: (602) 783-0652

### Organ Pipe Cactus National Monument

The program Juntos: Maestros y Ninos del Desierto provides hands-on experiences in the field to help students to learn about the desert ecosystem and how their presence here impacts that ecosystem. Pre-visit classroom exercises prepare them for their field experience. The multicultural program provides opportunities to explore and understand different values. It also promotes a sense of land stewardship and increases understanding of how human activities affect the land.

Harold J. Smith, Superintendent Organ Pipe Cactus National Monument Route 1, Box 100 Ajo, AZ 85321 (602) 387-7661, ext. 7500 Fax: (602) 387-7661, press 2

### Lake Mead National Recreation Area

Environmental educational programs are offered for grades 1–6. Pre- and post-visit curriculum materials are provided.

Division of Interpretation Lake Mead National Recreation Area 601 Nevada Highway Boulder City, NV 89005 (702) 293-8920



### Natural Resources Workshop for Arizona Youth

The program involves hands-on, field-oriented investigation and interaction. Sessions include ecology, geology, soils, plants, wildlife and hydrology, forest and range analysis, watershed management, irrigation, farm and ranch management, recreation, wilderness, and cultural resources.

Lynn Saline, Area Manager Stafford District 711 14th Avenue Stafford, AZ 85546 (520) 428-4040 / Fax: (520) 428-3722

### **Petrified Forest National Park**

Fascinating Fossil Factory, a curriculumbased paleontology program, is the first comprehensive education program produced by the park. The program will serve as a prototype from which the scope of the education programs will be extended to include other park resources. This program includes recommended classroom activities that prepare the students for the in-park section; a field activity that requires observation, analysis, and teamwork; and follow-up activities that consist of a compilation of findings.

Paula Hosking, Park Ranger/Education Coordinator Petrified Forest National Park PO Box 2217 Petrified Forest, AZ 86028 (602) 524-6228, ext. 233 Fax: (602) 524-3567

## Project Water Education for Teachers (WET)

Project WET is an interdisciplinary water education program intended to supplement a school's existing curriculum. Classroom-ready teaching aides being developed include activity guides and modules for grades K-12, computer simulations, water-history publications, groundwater flow models, and a series of children's story and action books.

Larry Sullivan, Associate Director Water Resources Research Center 350 North Campbell Avenue Tucson, AZ 85721 (602) 792-9591

### **Project WILD**

Project WILD offers teacher training and educational materials. Teacher guides, free to teachers who attend the training session, contain more than 80 supplementary, interdisciplinary activities for grades K–12.

Project WILD Coordinator Arizona Game and Fish Department 2221 West Greenway Phoenix, AZ 85023 (602) 789-3228 or 789-3920

### Saguaro National Monument

In the Desert Communities program, students are introduced to the people, animals, and plants of the Sonoran Desert in the Tucson Basin. A teacher workbook is sent in advance of a pre-visit to the classroom before the students participate in the two-hour site visit. Desert Discoveries is an environmental education program that introduces Sonoran Desert plants and animals, as well as the interrelationships between them. The program includes an introduction to homesteading. A teacher workshop is held annually (three days/15 hours total). A pre-visit is made to the participating school. Also available is a Junior Ranger Program, a day camp consisting of four week-long programs serving 20 children each week. Daily topics cover park rangers, birds, wildlife, and plants and conservation. A Check-Out Activity Booklet Program is also available, through which parents borrow a backpack of supplies to aid the child in completing the activities in the Junior Ranger Booklet.

Tom Danton, Chief of Interpretation Saguaro NM—Tucson Mountain District 3693 South Old Spanish Trail Tucson, AZ 85730 (520) 733-5133

### SMILE: Science and Mathematics for Indian Learners and Educators

The purpose of the SMILE workshop is to provide needed skills in the areas of science and mathematics to Indian learners and educators from across the State of Arizona. The six goals of the workshop are as follows: (1) to understand new approaches to teaching science, mathematics, and environmental education; (2) to understand curriculum development strategies; (3) to increase the variety of instructional strategies in science and mathematics teaching; (4) to elevate awareness of resources available for science, mathematics, and environmental education instruction; (5) to adapt commercial materials for classroom use; and (6) to develop culturally relevant curriculum materials that reflect current ideas in science and mathematics education.

Dr. Carol R. Adkins, Coordinator SMILE Workshop Northern Arizona University PO Box 5697 Flagstaff, AZ 86011 (602) 523-7521

### ▶ Department of Labor (DOL)

## Job Training Partnership Act (JTPA) Liaison

The JTPA Liaison can provide information about the Job Training Partnership Act State and local programs for economically disadvantaged adults and youth.

James B. Griffith, Acting Assistant Director Division of Employment and Rehabilitation Services 1789 West Jefferson PO Box 6123, Suite 901A

Phoenix, AZ 85005 (602) 542-4910 / Fax: (602) 542-2273

### ► Department of Transportation (DOT)

## Federal Aviation Administration (FAA) Aviation Education

The FAA Aviation Education Representative coordinates aviation education services, including materials and programs for the FAA in the States assigned to the region.

Programs include the following:

- ▶ The Aviation Career Education (ACE)
  Academy is a one-week summer aviation
  education program for high school students sponsored by the FAA along with a
  host educational institution. The program
  provides students with diverse experiences
  in aviation career exploration. The focus
  is on aviation career clusters identified by
  FAA, with an emphasis on opportunities
  for women and minorities. A goal is to
  have one program in each State and U.S.
  Territory. The FAA will conduct regional
  leadership workshops and provide funds
  based on the availability of resources.
- ► Aviation Education Workshops for Teachers provide teachers with information on FAA aviation programs and materials and prepare them to teach aviation in the classroom. Annual workshops are conducted at colleges and universities across the Nation. The FAA provides information, materials, and speakers for the program.
- National Congress on Aviation and Space Education is sponsored annually by the FAA in partnership with the National Aeronautics and Space Administration and the Civil Air Patrol. The meeting includes teacher workshops and crosstalk sessions to exchange ideas on promoting aerospace education.



Sandi Couverley, AWP-17F, FAA Aviation Education Representative PO Box 92007 Worldway Postal Center Los Angeles, CA 90009 (310) 297-0556 / Fax: (310) 297-0706

### FAA Aviation Education Resource Centers

Located at colleges, museums, and State aviation authority offices, these centers function as information distribution centers for Federal Aviation Administration education materials and resources. The Resource Centers maintain and provide quantities of printed materials, videotapes, and computer educational software. Center personnel can also provide general information, conduct workshops, and make aviation-related presentations.

Lew Davis, Program Manager Aviation Education Resource Center South Mountain High School Center for Aerospace Education 5401 South Seventh Street Phoenix, AZ 85040 (602) 271-3439

Tony Gulielmino, Aviation Department Chair Aviation Education Resource Center Pima Community College 1668 South Research Loop Road Tucson, AZ 85730 (602) 884-6186

Karen Hudson, Educational Programs Coordinator Aviation Education Resource Center Embry-Riddle Aeronautical University 3200 North Willow Creek Road Prescott, AZ 86301 (602) 771-6673

Gilbert McLaughlin Flandrau Science Center University of Arizona Tucson, AZ 85721 (602) 621-4515

## ► Environmental Protection Agency (EPA)

### **EPA** Regional Office

This office takes part in a variety of environmental education programs for both teachers and students. Programs range from teacher workshops and student contests to in-school presentations. Information on environmental issues is also available through the Public Information Center located at the office.

Stacey Benfer, Environmental Education Coordinator Environmental Protection Agency 75 Hawthorne Street (E-2) San Francisco, CA 94105 (415) 744-1586 / Fax: (415) 744-1605

### The President's Environmental Youth Awards (PEYA) Program

Young people from each State are invited to participate in PEYA, a nationwide program designed to encourage individuals, school classes, summer camps, public interest groups, and youth organizations to promote environmental awareness and community involvement. The two components of the program are the regional certificate program and the National awards competition. Regional certificates, signed by the President, are awarded to each participant by EPA regional offices. National individual project winners, or one representative from a National awardwinning group project, along with one sponsor, are honored at EPA headquarters in Washington, DC. Interested K-12 individuals or groups may obtain application materials and contest rules by contacting the EPA Regional Office that serves their State. PEYA has been an ongoing project since it was created by the White House Office of Education and the EPA in 1971.

EPA Region 9 75 Hawthorne Street (E-2) San Francisco, CA 94105 (415) 744-1582 / Fax: (415) 744-1605

# ► National Aeronautics and Space Administration (NASA)

### **NASA Educator Resource Center**

The center has NASA-related educational materials in various formats, including laserdiscs, CD-ROMs, videotapes, slides, audiotapes, publications, and teacher guides. Educators may preview or copy NASA materials upon request.

NASA Ames Research Center Educator Resource Laboratory Educator Resource Center, MS T12-A Moffett Field, CA 94035-1000 (415) 604-3574

### **NASA Field Centers**

Each field center has an educational programs officer who is responsible for precollege education programs. In addition to administering National programs, the center offers programs and services to meet regional and local needs.

Garth A. Hull, Chief Educational Programs Branch NASA Ames Research Center Mail Stop 204-12 Moffett Field, CA 94035 (415) 604-5543

### NASA Regional Educator Resource Center (RERC)

To offer more educators the opportunity to visit the Educator Resource Center Network (ERCN), NASA forms partnerships with planetariums, universities, museums, and other nonprofit organizations to serve as RERCs. Teachers may preview or copy NASA materials upon request.

Lunar and Planetary Laboratory NASA Regional Educator Resource Center University of Arizona Tucson, AZ 85721-0001 (520) 621-6939 or 621-6947

### **Space Grant Consortium**

The Space Grant Consortium in each State consists of colleges, universities, industry, and other organizations that have an interest in aeronautics and space education. Each consortium receives NASA funds for use in implementing a balanced program of research, education, and public service.

Arizona Space Grant Consortium University of Arizona Lunar and Planetary Lab, Room 333 Tucson, AZ 85721 (602) 621-8556

### **California**

## ► Department of Agriculture (USDA)

### 4-H State Leader

The State 4-H Youth Development Programs are administered by the Cooperative Extension Service at land-grant universities. State 4-H leaders coordinate outreach services and training to all county offices.

Steven D. Mendivil, Program Coordinator 1333 Research Park Drive University of California Davis, CA 95616 (916) 754-8518 / Fax: (916) 754-8541 E-mail: sdmendivil@ucdavis.edu





### Ag in the Classroom State Leader

This program promotes increased understanding of agriculture and possible careers in the agricultural sciences. With National leadership provided by USDA, each State manages its own programs, with assistance from agribusiness, educational institutions, and government.

Mark Linder California Foundation for Ag in the Classroom 1601 Exposition Boulevard, FB 16 Sacramento, CA 95815 (916) 924-4380 / Fax: (916) 923-5318

## **▶** Department of Commerce (DOC)

## Channel Islands National Marine Sanctuary

The sanctuary offers a science education program and a variety of educational materials for fifth-grade students in the Santa Barbara school system. In-school presentations may also be arranged.

Laura Gorodezky, Education Coordinator Channel Islands National Marine Sanctuary 113 Harbor Way Santa Barbara, CA 93109 (805) 966-7107 / Fax: (805) 568-1582

## Elkhorn Slough National Estuarine Research Reserve

The reserve offers teacher workshops, teacher guided tours, and curriculum materials.

Becky Christensen, Education Coordinator Elkhorn Slough National Estuarine Research Reserve 1700 Elkhorn Road Watsonville, CA 95076 (408) 728-2822 / Fax: (408) 728-1056

## Gulf of the Farallones National Marine Sanctuary

The sanctuary offers annual science workshops for teachers. The Whale Bus, a traveling exhibit, offers hands-on activities and visits schools upon request.

Edward Ueber, Manager Gulf of the Farallones National Marine Sanctuary Fort Mason Building, Room 201 San Francisco, CA 94123 (415) 561-6622 / Fax: (415) 561-6616

## Monterey Bay National Marine Sanctuary

This recently designated sanctuary will create education programs in the coming year.

Liz Love, Education Coordinator Monterey Bay National Marine Sanctuary 299 Foam Street, Suite D Monterey, CA 93940 (408) 647-4201 / Fax: (408) 647-4250

### National Sea Grant College Program, Operation Pathfinder

The program consists of two-week summer courses that present an introduction to oceanographic and coastal processes. Courses are available in six regions and are designed to enhance skills in science teaching.

Michael Spranger Washington Sea Grant University of Washington, HG-3 3716 Brooklyn Avenue NE Seattle, WA 98105-6716 (206) 543-6600 / Fax: (206) 685-0380

### Tijuana River National Estuarine Research Reserve

The reserve offers teacher training courses and student programs, which include nature walks and classes.

Gail Sevrens, Education Coordinator Tijuana River National Estuarine Research Reserve 301 Caspian Way Imperial Beach, CA 91932 (619) 575-3613 / Fax: (619) 575-6913

## ► Department of Defense (DoD)

### Civil Engineer Corps—Seabee

Designed to highlight the importance of engineering in the Naval forces, the Seabee Museum exhibits the history and technology of various projects of the Civil Engineer Corps. Tours are available upon request.

Civil Engineer Corps—Seabee Museum Naval Construction Battalion Center 1000 23rd Avenue Code 10H Port Hueneme, CA 93043-4301 (805) 982-5611 / Fax: (805) 982-5595

### Naval Air Station, Lemoore

The station participates in the Navy Community Service Program through formation of partnerships with schools and other youth organizations throughout the local area.

NAS, Lemoore CA Commander, Naval Air Station Lemoore 810 Avenger Avenue Code 013 Lemoore, CA 93246-5037 (209) 998-2137

### Naval Air Station, Point Mugu

The station participates in the Navy Community Service Program through formation of partnerships with schools and other youth organizations throughout the local area.

NAVAIRWARCENWPNDIV Point Mugu CA Commander, Naval Air Warfare Center Weapons Division Point Mugu, CA 93042-5000 (805) 989-3254

### Naval Base, San Diego

The base participates in the Navy Community Service Program through formation of partnerships with schools and other youth organizations throughout southern California, Arizona, Hawaii, and Nevada.

COMNAVBASE, San Diego CA Commander, Naval Base 937 North Harbor Drive Code 012 San Diego, CA 92132-5100 (619) 532-1514

#### Naval Base, San Francisco

The base participates in the Navy Community Service Program through formation of partnerships with schools and other youth organizations throughout northern California.

COMNAVABASE, San Francisco CA Commander, Naval Base Treasure Island 410 Palm Avenue Code N-5 San Francisco, CA 94130-0411 (415) 395-3928

### ▶ Department of Education (ED)

#### **Eisenhower State Coordinators**

Eisenhower State Coordinators administer the Eisenhower Professional Development Program State Formula grants. The program focuses on sustained and intensive high-quality professional development through inservice programs.

Dr. Gayland Jordan
Eisenhower Professional Development
Program
California Department of Education
721 Capitol Mall, Third Floor
Sacramento, CA 94244-2720
(916) 657-4865 / Fax: (916) 657-3467



## **Eisenhower State Coordinators** for Higher Education

Eisenhower State Coordinators oversee the Eisenhower Professional Development State Formula Grants for the State Agency for Higher Education (SAHE). The program focuses on teacher enhancement through both inservice and preservice programs.

Linda Barton White
Eisenhower Professional Development
Program
California Postsecondary Education
Commission
1303 J Street, Suite 500
Sacramento, CA 95814
(916) 322-7984 / Fax: (916) 327-4417

# Pacific and Southwest Regional Technology in Education Consortium (PSR\*TEC)

ED established the Regional Technology in Education Consortia (R\*TEC) program in the fall of 1995 to help States, districts, schools, adult literacy centers, and other educational institutions use advanced technology to support improved teaching and student achievement. R\*TEC's role in educational technology is unique in two ways: the emphasis is regional and the primary goal is to ensure that technology is used effectively to support school reform. Program strategies include professional development, technical assistance, and information dissemination.

Kevin Rocap, Director
PSR\*TEC
Center for Language Minority Education and
Research
c/o College of Education
California State University, Long Beach
1250 Bellflower Boulevard
Long Beach, CA 90840-2201
(310) 985-1570 / Fax: (310) 985-4528
E-mail: krocap@csulb.edu
WWW: http://www.csulb.edu/~clmer/
pswrtc/pswrtc.html

Neal Kaske, R\*TEC Project Officer
U.S. Department of Education
Office of Educational Research and
Improvement
Office of Library Programs, Room 300h
555 New Jersey Avenue NW
Washington, DC 20208-5571
(202) 219-1871
E-mail: nkaske@inet.ed.gov

# WestEd Eisenhower Regional Consortium for Science and Mathematics Education

The Eisenhower Regional Consortium provides information and technical assistance to help States and school districts improve mathematics and science education.

Art Sussman and Steve Schneider, Co-Directors

WestEd Eisenhower Regional Consortium for Science and Mathematics Education 730 Harrison Street San Francisco, CA 94107-1242

San Francisco, CA 94107-1242 (415) 565-3000 / Fax: (415) 241-2746 WWW: http://www.wested.org/werc/

### WestEd Regional Educational Laboratory

WestEd identifies effective teaching techniques and school improvement efforts within the region and shares this information with State and local educators.

Dean H. Nafziger, Executive Director WestEd Regional Educational Laboratory 730 Harrison Street San Francisco, CA 94107-1242 (415) 565-3000 / Fax: (415) 565-3012

## ► Department of Energy (DOE)

### Elk Hills Naval Petroleum Reserves

Elk Hills is one of the Nation's leading producers of crude oil and California's largest producer of natural gas. In addition to daily operations, Elk Hills is committed to future generations, encouraging young people in Kern County to pursue careers in mathematics and science through active involvement in various education outreach programs. One of the largest and most visible programs is the annual Kern County Regional Science Bowl. In addition to the Science Bowl, Elk Hills is host to many other programs, including paid student summer internship programs, Earth Day elementary school activities, and the environmental Pockets Educational Outreach Program, as well as various oil field tours and a one-day shadowing program. Elk Hills also provides a large number of employees to judge at various school science fairs, Engineering and Science Achievement (MESA) program, the Science Olympics, career days, and Arco's Coles Levee Ecosystem Preserve educational program.

Todd G. Goode, Public Affairs Naval Petroleum Reserves in California U.S. Department of Energy PO Box 87 Tupman, CA 93276 (805) 763-6067 / Fax: (805) 763-6699

## Lawrence Berkeley National Laboratory

The laboratory works with the Bay Area Science and Technology Education Collaboration to improve education in science, mathematics, and technology. Research opportunities are available for local high school students, secondary teachers, and undergraduate students. Various outreach programs are also available.

Roland Otto, Director Lawrence Berkeley National Laboratory Center for Science and Engineering Research One Cyclotron Road, Building 938C Berkeley, CA 94720 (510) 486-5325 / Fax: (510) 486-6660 E-mail: rjotto@lbl.gov

### Lawrence Livermore National Laboratory

The primary mission of the laboratory is "to provide the scientific and technological tools needed to meet critical National missions in the next 20 years." The Education Program is channeling the unique scientific and technical resources of the laboratory toward systemic improvement in science, mathematics, engineering, and technology education to ensure a highly skilled, diverse workforce. The laboratory introduces new approaches to teaching science and mathematics, integrates laboratory core competencies and technology to enhance science education, enhances public understanding and awareness of science and technology, and provides students and educators with opportunities to conduct research and earn advanced degrees.

Eileen S. Vergino, Director Education Program Lawrence Livermore National Laboratory Livermore, CA 94550 (510) 422-3907 / Fax: (510) 422-5761 E-mail: verginoes@llnl.gov

### Western Area Power Administration (WAPA)

WAPA conducts the Regional Science Bowl, an academic competition sponsored by DOE and the community. Held each February, the Bowl encourages the study of science and mathematics and the pursuit of related careers. The regional winner advances to the National competition, held each spring in Washington, DC.

Guy Nelson Western Area Power Administration— Sacramento 114 Park Shore Drive Folsom, CA 95670-4710 (916) 353-4435 / Fax: (916) 985-1930 E-mail: gnelson@wapa.gov

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## ► Department of the Interior (DOI)

### Adopt-a-Watershed

This program is designed around a K-12 curriculum that teaches the fundamentals of watershed planning and management.

George Wingate, Hydrologist 705 Hall Street Susonville, CA 96130 (916) 257-0456 / Fax: (916) 251-5539

## Alturas Bureau of Land Management (BLM)

Adopt-a-Ranch provides environmental education to high school students. Subjects taught include wildlife, livestock management, cultural heritage, forestry, fire management, vegetation, and hydrology. Students receive lectures in the classroom and participate with trips to the Yankee Jim Ranch.

Sixth Grade Field Day provides a day of environmental education to middle school students. Subjects taught include: wildlife, livestock management, cultural heritage, forestry, fire management, vegetation, and hydrology. The field day links BLM specialists with local students and teachers.

Rich Burns, Alturas Area Manager 708 West 12th Street Alturas, CA 96101 (916) 233-4666 / Fax: (916) 233-5696

## Bakersfield Bureau of Land Management (BLM)

An Ecology Field Trip Program Monthly consists of family-oriented ecology field trips to points of environmental interest in California. Classroom ecology and Earth science experiments and demonstrations are also provided by BLM naturalists.

Gregg Wilkerson, Geologist Bakersfield District 3801 Pegasus Drive Bakersfield, CA 93308 (805) 391-6081 / Fax: (805) 391-6040

### **Bureau of Land Management State Office**

The office provides information about educational programs and materials. Information about local programs managed by district offices, such as the Hollister Resource Area Office, is also available.

Education Coordinator Bureau of Land Management 2800 Cottage Way, E-2841 Sacramento, CA 95825 (916) 978-4746

### Bureau of Reclamation Environmental Education

A variety of environmental subjects, with an emphasis on water resources, is offered to teachers and students in grades K–12. Subjects vary from groundwater model to instant snow storms and wetlands in a pan. Programs are presented in the classroom as well as outdoors at laboratory schools, summer camps, and at some visitor centers. The program currently operates in the States of California, Colorado, Montana, Nevada, Idaho, and Utah.

Theresa Taylor, Environmental Education Program Assistant Denver Federal Center, D-5100 Building 67 Denver, CO 80225 (303) 236-9336, ext. 262 Fax: (303) 236-3573

#### Cabrillo National Monument

Ranger-Led Auditorium Programs introduce movies dealing with the Voyage of Cabrillo, the Pacific Grey Whale, and the tidepools. The information provides a foundation for studies related to these three topics.

Cquvator Gatson, Education Coordinator Interpretation Division Cabrillo National Monument PO Box 6670 San Diego, CA 92064 (619) 557-5450 / Fax: (619) 557-5469

### Caring for the Land

This interagency, year-round, environmental education area is permanently located on the Los Angeles County Fairgrounds. It was built and is managed cooperatively by the Bureau of Land Management, USDA, Forest Service, National Park Service, California Department of Forestry and Fire, and the Los Angeles County Forestry and Fire Warden. The site includes an interpretive trail through southern California native ecosystems, an amphitheater, and a restored firetower. Programs are given by Native Americans on native plant uses, tree potting, etc.

Elayn Briggs, Environmental Education Coordinator California Desert District Office 6221 Box Springs Boulevard Riverside, CA 92507 (909) 697-5200 / Fax: (909) 697-5296

#### **Channel Islands National Park**

The park offers environmental programs, including guided walks, lectures, a video, and teacher workshops. In the Floating Classroom program, park concessions and park interpreters conduct educational presentations on ships out to Anacapa Island and on the island. All-day programs highlight marine life

and history of the islands. Students hike on the island and explore the tidepools.

Carol J. Spears, Chief Division of Interpretation Channel Islands National Park 1901 Spinnaker Drive Ventura, CA 93001 (805) 658-5700 / Fax: (805) 658-5799

### **Death Valley National Monument**

The monument offers environmental programs, including guided walks, lectures, and hands-on activities. In the Junior Ranger Education Program, interpreters travel to area schools and present information about the park to students. All activities are completed in and around the school. This program teaches stewardship of Death Valley and other public lands. An activity book, certificate, and badge are provided.

Glenn R. Gossard, South District Interpreter Death Valley National Monument Death Valley, CA 92328 (619) 786-2331 / Fax: (619) 786-3283

# The Desert Tortoise Multi-Agency Exhibit Project: Win the Race Against Extinction

This is a multi-agency effort to provide California and Nevada public schools with educational materials. The exhibit includes portable display boards with photos and text, exhibit kits containing freeze-dried tortoise and tortoise shells showing predation and degradation, plants eaten by the tortoise, posters, videos, teacher guide, bookmarks, trading cards, etc.

Mary Webb, Writer/Editor Regional Office Division of Environment PO Box 61470 Boulder City, NV 61470 (702) 293-8704 / Fax: (702) 293-8023

#### Folsom Dam

Guided tours are provided by the Bureau of Reclamation.

Jeff McCracken Public Affairs Office, Mid-Pacific Region Bureau of Reclamation Federal Office Building 2800 Cottage Way Sacramento, CA 95825-1846 (916) 979-2837

### Fort Cronkhite

"Walk to the Edge of America—the Military" is a two-hour, ranger-guided interpretive presentation focusing on U.S. history in California from 1850 to the present. The program uses the park's abandoned forts as learning and discussion tools. Activities



include archaeological explorations, discussion of perceived foreign threats, changing technology, and problem resolutions on personnel and global levels.

Another program is "B" Is for Biodiversity. Through a series of engaging activities, students walk a trail and begin to understand the concept of ecosystem health through a variety of species. Games, discovery walks, discussion, problem solving, and solo walks allow the students to experience why they value biological systems.

Diane Dobos-Bubno, Park Ranger Building 1056 Fort Cronkhite Sausalito, CA 94965 (415) 331-0845 / Fax: (415) 331-1428

#### Golden Gate National Park

Exploring the Neighborhoods at the Golden Gate features a hike along the coastal bluffs and shoreline at the Golden Gate. Students learn about the homes of the plants, animals, and people who have lived there. Students meet the plants and animals that live in the forest, the bay, the beach, and the tide line. Participants catch and release a crab, observe animal "neighborhoods," and discuss how their lives affect all the neighborhoods around them.

A Walk Through Time features a hike in the forest, during which students learn about the geography, geology, and natural history of the Presidio and how it has changed through time. They also learn how the Ohlone, Spanish, Mexican, and American communities have lived with the land.

Jill Torres, Education Coordinator Golden Gate National Park Association Fort Mason, Building 201 San Francisco, CA 94123 (415) 556-1874 / Fax: (415) 992-2692

### Golden Gate National Recreation Area

Curriculum-based programs are led by trained staff who stress outdoor activities. Teacher guides that detail pre- and post-visit activities are available for each program. For example, Adopt-a-Beach is an environmental education program that teaches students about the effects of garbage on ocean ecosystems. Curriculum developed by the California Coastal Commission supplements a field trip to Ocean Beach (San Francisco) where students participate in a beach cleanup.

The Junior Ranger Program is a six-part education program that provides students and teachers with an in-depth National park experience. Students learn about natural and cultural resources of the park through a series of field trips to different park sites. Through

discussion, hands-on activities, and journal assignments, students develop life-long skills such as cooperation, observation, decision making, questioning, recording, and analyzing information. All field trips are ranger led.

Kevin Turner, Fort Funston Site Supervisor Golden Gate National Recreation Area Fort Mason Building 201 San Francisco, CA 94123

(415) 239-2366 / Fax: (415) 556-1638

### Joshua Tree National Monument

The monument manages several ranger-led natural-science oriented educational programs that are available both onsite and in the classroom. For example, Introduction to Joshua Tree National Monument acquaints students to the natural, cultural, and geographic features of the park.

Division of Interpretation Joshua Tree National Monument 74485 National Monument Drive Twentynine Palms, CA 92277-3597 (619) 367-7511

### Joshua Tree National Park

Geology of Joshua Tree National Park introduces students to geological concepts and to the forces creating the Park's landscape.

Programs include the following:

- ► Habitats Are Where It's At helps students define "habitat" and stresses the importance of habitats for all living things.
- ► The Joshua Tree Hotel gives students a look at the life supported by a single joshua tree and it emphasizes interrelationships.
- The Junior Ranger Program is a comprehensive unit introducing students to National Park Service history and philosophy, careers, and cultural and natural history of the Joshua Tree National Park. This program includes a service project.
- The Mojave Desert Discovery Educator's Guide provides information about the cultural and natural history of Joshua Tree National Park and four other Mojave Desert Parks.
- Project Learning Tree, through hands-on interdisciplinary activities, encourages students to investigate environmental issues and to make informed, responsible decisions.
- The Oasis Ecosystem introduces students to the interrelationship between plants, animals, and people who inhabit an oasis.
- ► Project Wild Workshops provide supplementary activities in environmental educa-

- tion and resource conservation with an emphasis on wildlife.
- ► In Who Lives in the National Park? students take a look at the diversity of life in the park and distinguish between wild versus domestic and living versus nonliving.
- Who's Who and What's What? introduces students to common desert plants and animals.

Carol Peterson, Education Specialist Joshua Tree National Park 9800 Black Rock Canyon Road Yucca Valley, CA 92284 (619) 365-2371

#### Lassen Volcanic National Park

The National Park Education Program provides students with a variety of structured and educational activities designed to enhance their understanding of the natural and cultural history of Lassen Volcanic National Park. The program also strives to increase the participant's understanding of the importance and values of the National Park System. In addition, the park offers guided walks, lectures, a museum, and handson activities that focus on anthropological and geological aspects of the park. In-school presentations may be requested.

The Winter Ecology Snowshoe Program is designed to increase student awareness and understanding of the interrelationships of the plant and animal communities of Lassen in winter. The program is also designed to introduce students to the importance of snow and the role it plays in the environment. Students learn the proper way to snowshoe as well as winter survival skills.

Steve Zachary, Education Coordinator Division of Interpretation Lassen Volcanic National Park PO Box 100 Mineral, CA 96063-0100 (916) 595-4444 / Fax: (916) 595-3262

### Lava Beds National Monument

Programs include guided walks that focus on anthropological and geological aspects of the park.

Yvonne McMillan, Interpretative Ranger Lava Beds National Monument PO Box 867 Tulelake, CA 96134 (916) 667-2282

### Menlo Park Earth Science Information Center

The center offers information and sales service for U.S. Geological Survey map products and Earth science publications.



Menlo Park Earth Science Information Center Building 3, Room 3128, MS 532 345 Middlefield Road Menlo Park, CA 94025-3591 (415) 329-4309

## Minerals Management Service (MMS) Regional Office

The MMS Regional Office provides a range of educational services. Teacher inservice programs and classroom visitations may include supplemental materials. Availability may be limited, but arrangements may be made for duplication of some materials at minimal cost.

Royalty Management Program Minerals Management Service Office of Public Affairs 1201 Elmwood Park Boulevard, MS 500 PO Box 25165 Lakewood, CO 80225 (303) 231-3162 / Fax: (303) 231-3780

Pacific Outer Continental Shelf Region Minerals Management Service Education Coordinator 770 Paseo Camarillo, MS 7000 Camarillo, CA 93010 (805) 389-7520 1-800-6PAC-OCS / Fax: (805) 389-7526

### Muir Woods National Monument

Discovery Packs are backpacks designed to provide a self-guided, hands-on learning experience for school groups (grades K–8, by reservation) and families (on a drop-in basis). The backpacks contain an activity guide and a variety of tools that can be used to explore the park.

In the Junior Ranger Ecology Hike, junior rangers ages 8–11 accompany a staff member on a strenuous four-mile hike to explore the diverse ecological communities of Muir Woods and surrounding Mount Tamalpais State Park.

Mia Monroe, Interpretive Specialist Muir Woods National Monument Mill Valley, CA 94941 (415) 388-2596 / Fax: (415) 389-6957

### **New Melones Lake**

The Visitor Center offers an interpretive program on the historical and archaeological cultural resources at the New Melones Project.

Jeff McCracken
Public Affairs Office, Mid-Pacific Region
Bureau of Reclamation
Federal Office Building
2800 Cottage Way
Sacramento, CA 95825-1846
(916) 979-2837

#### **Pinnacles National Monument**

In the Junior Park Management program, students are introduced to the management of National parks, their organization, philosophy, the National Park Service (NPS) mission, and responsibility to future generations. Students learn what their responsibilities are as owners and users of public lands. The partnership between the NPS and students is emphasized.

William Lester, Chief Ranger Pinnacles National Monument Paicine, CA 95043 (408) 389-4485 / Fax: (408) 389-4489

### Point Reyes National Seashore

Both the South and North Districts of the seashore offer environmental education programs for teachers and students. The Clem Miller Environmental Education Center is available to educators and students for a five-day wilderness awareness program.

Other programs include the following:

- ► Habitat Trek: The Next Generation, a one-mile walk through fields and forest, involves children in games and activities. A variety of habitats are explored, and children learn about the importance and interdependence of all life forms.
- ▶ Bird Rap, an auditorium-based program, gives students the opportunity to meet a live western screech owl. Topics covered include bird adaptations, especially habits of raptors, and the conservation of habitats.
- ▶ Shake, Rattle, and Roll introduces students to earthquake preparedness, the theory of plate tectonics, and the geology of the Point Reyes Peninsula through an active hands-on walk along the half-mile, accessible Earthquake Trail.
- Whale Watching at the Headlands focuses on the physical adaptations that the migrating California gray whales need to undertake their lengthy journey. Tips on viewing gray whales off the coast are also given.

John A. Dell'Osso, Acting Chief of Interpretation Point Reyes National Seashore Point Reyes Station, CA 94956 (415) 663-8522 / Fax: (415) 663-8132

## Project Water Education for Teachers (WET)

Project WET is an interdisciplinary water education program intended to supplement a school's existing curriculum. Classroom-ready teaching aides being developed include activity guides and modules for grades K-12, computer simulations, water-history publications,

groundwater flow models, and a series of children's story and action books.

Rita Sudman Water Education Foundation 717 K Street, Suite 517 Sacramento, CA 95814 (916) 444-6240

### **Project WILD**

Project WILD offers teacher training and educational materials. Teacher guides, free to teachers who attend the training session, contain more than 80 supplementary, interdisciplinary activities for grades K-12.

Elena Tarailo, Project WILD Coordinator California Department of Fish and Game 1416 Ninth Street Sacramento, CA 95814 (916) 653-9843 / Fax: (916) 653-1856

### **Redwood National Park**

Field seminars supplement park interpretation by providing concentrated field study of the natural and cultural history of the coast redwood ecosystem.

Programs include the following:

- ▶ The Howland Hill Outdoor School introduces students to coast redwood and stream ecology of the park. One- to threeday programs are available. The programs match the Del Norte County School District curriculum goals for science and some history themes. There is a one-day teacher workshop.
- ▶ Wolf Creek Outdoor School is a curriculum-based program on coastal redwood forests and prairie community for elementary school children. There is a pre-visit video and curriculum guide. The programs are ranger-led at the site on stream ecology, redwood trees, and prairies.

Kim Sikoryak, Chief Interpreter Redwood National Park 1111 Second Street Crescent City, CA 95531 (707) 464-6101 / Fax: (707) 464-1812

### Sacramento National Wildlife Reserve

Educators use the Discovery Pack to guide students on a wetlands walk within the Sacramento National Wildlife Refuge.

Denise Dachner Outdoor Recreation Planner Sacramento NWR 752 County Road 99W Willows, CA 95988 (916) 934-2801 / Fax: (916) 934-7814



## San Francisco Bay National Wildlife Refuge

An environmental education center in the refuge offers extensive programs for students and teachers. Interpretive trails and other services are also available.

Public Use Manager San Francisco Bay National Wildlife Refuge PO Box 524 Newark, CA 94560 (510) 792-0222 / Fax: (510) 792-5828

#### San Luis Reservoir

The Visitor Center offers interpretive tours and exhibits of this joint State-Federal reclamation project.

Jeff McCracken Public Affairs Office, Mid-Pacific Region Bureau of Reclamation Federal Office Building 2800 Cottage Way Sacramento, CA 95825-1846 (916) 979-2837

### Santa Monica Mountains Recreation Area

Introduction to Parks as Laboratories: Studies in Air, Water, and the Land is a two-part program in which educators learn organizational skills for field labs; practice laboratory techniques; and operate tools and equipment used for scientific studies in air, water, and the land. Topics include using the "Discovery Scope"; soil, water, and air testing; basic compass and orienteering; measuring weather; and using the metric system. A version of the program that offers handson experiences for students is also available.

Lorenza Fong, Branch Chief of Interpretation Santa Monica Mountains Recreation Area 30401 Agoura Road, Suite 100 Agoura Hills, CA 91301 (818) 597-1036, ext. 254 Fax: (818) 597-8357

## Sequoia and Kings Canyon National Parks

These parks offer guided tours, lectures, and environmental education activities, as well as in-class presentations.

Division of Interpretation Sequoia and Kings Canyon National Parks Three Rivers, CA 93271-9700 (209) 565-3131

### Shasta Dam

The Visitor Center offers tours and exhibits of the dam's construction, the management of the Central Valley Project, and the area's fish and wildlife resources.

Jeff McCracken
Public Affairs Office, Mid-Pacific Region
Bureau of Reclamation
Federal Office Building
2800 Cottage Way
Sacramento, CA 95825-1846
(916) 979-2837

#### Yosemite National Park

The park has several educational programs:

- Classrooms in the Park—School Program allows school classes to spend one or two hours with a park ranger and/or a member of Yosemite's Indian Culture staff. Spring classes focus on natural history; fall themes are based on cultural history. Materials presented are correlated to California State frameworks and include a National Park Service message of protection and preservation. All material can be adapted for groups with special needs.
- ▶ Commencement 2000 is an invitational program that allows inner-city school students to explore careers with natural resource agencies. The program is sponsored by several agencies, including National Park Service, the Bureau of Land Management, U.S. Fish and Wildlife Service, the Bureau of Reclamation, and the California Department of Fish and Game.
- ▶ Discover Yosemite: A Teacher Guide to the Park provides a self-guided way for teachers to visit the park with a class. Included are ideas on how to plan a trip; where to find features and help; maps; background information; resources; activities to do before, during, and after the visit; and education programs description.
- ▶ The Environmental Living Program permits students to stay overnight at the Pioneer History Center and assume the roles of historical people who influenced the development and protection of Yosemite National Park. The focus of the program is the mock establishment of a National park. An overnight workshop for teachers is required.
- ▶ The Junior/Senior Ranger Program allows Junior Rangers (ages 8–10) and Senior Rangers (ages 11–12) to experience nature through interactive learning during a three-hour class with a park ranger. Classes are held in Yosemite Valley for Junior and Senior Rangers and in Tuolvmne Meadows for Senior Rangers only. Various topics are explored, such as American Indians, habitats, and water cycle/pond life. Junior and Senior Rangers also attend regular ranger-led interpretive programs.
- ► The Teacher Intern Program brings teachers to Yosemite to live for five weeks

in the summer while developing curriculum-based programs related to the natural and cultural history of the park. The results are made available to teachers outside the park. Programs are hands-on, interactive, and interdisciplinary.

Betsey Clopine, Education Specialist Yosemite National Park Education Program PO Box 577 Yosemite, CA 95389 (209) 372-0644 / Fax: (209) 372-0458

## ► Department of Labor (DOL)

## Job Training Partnership Act (JTPA) Liaison

The JTPA Liaison can provide information about the Job Training Partnership Act State and local programs for economically disadvantaged adults and youth.

Thomas Nagle, Director California Department of Employment Development 800 Capitol Mall, MIC 83 Sacramento, CA 95814 (916) 654-8210 / Fax: (916) 657-5294

## ► Department of Transportation (DOT)

## Federal Aviation Administration (FAA) Aviation Education

The FAA Aviation Education Representative coordinates aviation education services, including materials and programs for the FAA in the States assigned to the region.

Programs include the following:

- ▶ The Aviation Career Education (ACE)
  Academy is a one-week summer aviation
  education program for high school students sponsored by the FAA along with a
  host educational institution. The program
  provides students with diverse experiences
  in aviation career exploration. The focus
  is on aviation career clusters identified by
  FAA, with an emphasis on opportunities
  for women and minorities. A goal is to
  have one program in each State and U.S.
  Territory. The FAA will conduct regional
  leadership workshops and provide funds
  based on the availability of resources.
- ► Aviation Education Workshops for Teachers provide teachers with information on FAA aviation programs and mate-



rials and prepare them to teach aviation in the classroom. Annual workshops are conducted at colleges and universities across the Nation. The FAA provides information, materials, and speakers for the program.

▶ National Congress on Aviation and Space Education is sponsored annually by the FAA in partnership with the National Aeronautics and Space Administration and the Civil Air Patrol. The meeting includes teacher workshops and crosstalk sessions to exchange ideas on promoting aerospace education.

Sandi Couverley, AWP-17F, FAA Aviation Education Representative PO Box 92007 Worldway Postal Center Los Angeles, CA 90009 (310) 297-0556 / Fax: (310) 297-0706

### FAA Aviation Education Resource Centers

Located at colleges, museums, and State aviation authority offices, these centers function as information distribution centers for Federal Aviation Administration education materials and resources. The Resource Centers maintain and provide quantities of printed materials, videotapes, and computer educational software. Center personnel can also provide general information, conduct workshops, and make aviation-related presentations.

Rick Piercy, Coordinator Aviation Education Resource Center Apple Valley Science and Technology Center PO Box 2968, 15552 Wichita Apple Valley, CA 92307 (619) 242-3514

Nick Milichevich, Chairman Aviation Education Resource Center San Jose State University Department of Aviation 1 Washington Square San Jose, CA 95192-0081 (408) 924-6580

Harvey Ferer Aviation Education Resource Center Museum of Flying 2772 Donald Douglas Loop North Santa Monica, CA 90405 (310) 392-8822

Nancy Harlan, Coordinator Aviation Education Resource Center San Bernardino County Superintendent of Schools Instructional Services Division 601 North East Street San Bernardino, CA 92410-3093 (714) 387-3152 Mary Ann Liette, Coordinator Aviation Education Resource Center Riverside County Office of Education 3939 13th Street Riverside, CA 92502-0868 (909) 788-6684

Toni Brown Aviation Education Resource Center Campbell County School District Media Services 525 W. Lakeway Road Gillette, WY 82718 (307) 682-3144

Karen Tozlian Fresno Unified School District Instructional Media Center 3132 E. Fairmont Fresno, CA 93725 (209) 441-3672

## ► Environmental Protection Agency (EPA)

### **EPA** Regional Office

This office takes part in a variety of environmental education programs for both teachers and students. Programs range from teacher workshops and student contests to in-school presentations. Information on environmental issues is also available through the Public Information Center located at the office.

Stacey Benfer, Environmental Education Coordinator Environmental Protection Agency (EPA) 75 Hawthorne Street (E-2) San Francisco, CA 94105 (415) 744-1586 / Fax: (415) 744-1605

## The President's Environmental Youth Awards (PEYA) Program

Young people from each State are invited to participate in PEYA, a nationwide program designed to encourage individuals, school classes, summer camps, public interest groups, and youth organizations to promote environmental awareness and community involvement. The two components of the program are the regional certificate program and the National awards competition. Regional certificates, signed by the President, are awarded to each participant by EPA regional offices. National individual project winners, or one representative from a National awardwinning group project, along with one sponsor, are honored at EPA headquarters in Washington, DC. Interested K-12 individuals or groups may obtain application materials and contest rules by contacting the EPA Regional Office that serves their State. PEYA has been an ongoing project since it was created by the White House Office of Education and the EPA in 1971.

EPA Region 9 75 Hawthorne Street (E-2) San Francisco, CA 94105 (415) 744-1582 / Fax: (415) 744-1605

# ► National Aeronautics and Space Administration (NASA)

#### **NASA Educator Resource Center**

The center has NASA-related educational materials in various formats, including laserdiscs, CD-ROMs, videotapes, slides, audiotapes, publications, and teacher guides. Educators may preview or copy NASA materials upon request.

Edmond Burke, President
Endeavor Center at Space Information
Laboratories, Inc.
NASA Educator Resource Center
Maple High School, Lompoc U.S.D.
PO Box 5090
Vandenburg AFB, CA 93437
(805) 735-5131

NASA Dryden Flight Research Center Public Affairs Office (Tri.42) NASA Educator Resource Center Edwards AFB, CA 93523-0273 (805) 258-3456

NASA Jet Propulsion Laboratory Educator Resource Center JPL Teaching Resource Center 4800 Oak Grove Drive, Mail Code CS-530 Pasadena, CA 91109-8099 (818) 354-6916

NASA Ames Research Center Educator Resource Laboratory Educator Resource Center, MS T12-A Moffett Field, CA 94035-1000 (415) 604-3574

### **NASA Field Centers**

Each field center has an educational programs officer who is responsible for precollege education programs. In addition to administering National programs, the center offers programs and services to meet regional and local needs.

Eugene L. Duke, Technology Commercialization Officer Public Affairs Office, Trl. 42 NASA Dryden Flight Research Facility Edwards AFB, CA 93523-0273 (805) 258-3802



Fred Shair, Manager Educational Affairs Office NASA Jet Propulsion Laboratory 4800 Oak Grove Drive, Mail Code 183-900 Pasadena, CA 91109 (818) 354-8251

Garth A. Hull, Chief Educational Programs Branch NASA Ames Research Center, MS 204-12 Moffett Field, CA 94035 (415) 604-5543

### **Space Grant Consortium**

The Space Grant Consortium in each State consists of colleges, universities, industry, and other organizations that have an interest in aeronautics and space education. Each consortium receives NASA funds for use in implementing a balanced program of research, education, and public service.

California Space Grant Consortium University of California at San Diego California Space Institute 9500 Gilman Drive, Mail Code 0524 LaJolla, CA 92093-0524 (619) 534-5869

### NASA Regional Educator Resource Center (RERC)

To offer more educators the opportunity to visit the Educator Resource Center Network (ERCN), NASA forms partnerships with planetariums, universities, museums, and other nonprofit organizations to serve as RERCs. Teachers may preview or copy NASA materials upon request.

NASA San Joaquin Valley Regional Educator Resource Center California State University at Fresno, MS 01 5005 North Maple Avenue Fresno, CA 93740-0001 (209) 278-0355

## ► National Science Foundation (NSF)

## Statewide Systemic Initiatives Program

Bringing together top State leadership, California's Statewide Systemic Initiatives Program is addressing barriers to improving K-6 science education and middle school mathematics education, with an emphasis on the full participation of underrepresented groups. Other objectives include gaining public support, developing and promoting elementary science instruction, and making mathematics curriculum and instruction consistent with National Council of Teachers of Mathematics standards.

Victor Cary, Director California Alliance for Mathematics and Science 300 Lakeside Drive 18th Floor Oakland, CA 94612-3550 (510) 987-0979 / Fax: (510) 987-9612

### Nevada

### ▶ Department of Agriculture (USDA)

### 4-H State Leader

The State 4-H Youth Development Programs are administered by the Cooperative Extension Service at land-grant universities. State 4-H leaders coordinate outreach services and training to all county offices.

Dr. Janet Usinger-Lesquereux, Assistant Director Statewide Administration Office 2317-A Renaissance Drive 935 East Sahara Avenue Las Vegas, NV 89119 (702) 795-0767 / Fax: (702) 795-2376 E-mail: usingerj@fs.scs.unr.edu

### Ag in the Classroom State Leader

This program promotes increased understanding of agriculture and possible careers in the agricultural sciences. With National leadership provided by USDA, each State manages its own programs, with assistance from agribusiness, educational institutions, and government.

Ben Damonte Nevada Ag in the Classroom Task Force 1300 Marietta Way Sparks, NV 89431 (702) 853-6464

### ▶ Department of Defense (DoD)

### Naval Base, San Diego

The base participates in the Navy Community Service Program through formation of partnerships with schools and other youth organizations throughout southern California, Arizona, Hawaii, and Nevada. COMNAVBASE, San Diego CA Commander, Naval Base 937 North Harbor Drive Code 012 San Diego, CA 92132-5100 (619) 532-1514

### ▶ Department of Education (ED)

### **Eisenhower State Coordinators**

Eisenhower State Coordinators administer the Eisenhower Professional Development Program State Formula grants. The program focuses on sustained and intensive high-quality professional development through inservice programs.

Holly Walton-Buchanan Eisenhower Professional Development Program Nevada Department of Education Capitol Complex Carson City, NV 89710 (702) 687-5136 / Fax: (702) 687-5660

## **Eisenhower State Coordinators** for Higher Education

Eisenhower State Coordinators oversee the Eisenhower Professional Development State Formula Grants for the State Agency for Higher Education (SAHE). The program focuses on teacher enhancement through both inservice and preservice programs.

Mike Hardie
Eisenhower Professional Development
Program
University and Community College System of
Nevada
2601 Enterprise Road
Reno, NV 89512
(702) 784-4022 / Fax: (702) 784-1127

# Pacific and Southwest Technology in Education Consortium (PSR\*TEC)

ED established the Regional Technology in Education Consortia (R\*TEC) program in the fall of 1995 to help States, districts, schools, adult literacy centers, and other educational institutions use advanced technology to support improved teaching and student achievement. R\*TEC's role in educational technology is unique in two ways: the emphasis is regional and the primary goal is to ensure that technology is used effectively to support school reform. Program strategies include professional development, technical assistance, and information dissemination.



#### Nevada

Kevin Rocap, Director,
PSR\*TEC
Center for Language Minority Education and
Research
c/o College of Education
California State University, Long Beach
1250 Bellflower Boulevard
Long Beach, CA 90840-2201
(310) 985-1570 / Fax: (310) 985-4528
E-mail: krocap@csulb.edu
WWW: http://www.csulb.edu/~clmer/
pswrtc/pswrtc.html

Neal Kaske, R\*TEC Project Officer U.S. Department of Education Office of Educational Research and Improvement Office of Library Programs, Room 300h 555 New Jersey Avenue NW Washington, DC 20208-5571 (202) 219-1871 E-mail: nkaske@inet.ed.gov

# WestEd Eisenhower Regional Consortium for Science and Mathematics Education

The Eisenhower Regional Consortium provides information and technical assistance to help States and school districts improve mathematics and science education.

Art Sussman and Steve Schneider, Co-Directors WestEd Eisenhower Regional Consortium for Science and Mathematics Education 730 Harrison Street San Francisco, CA 94107-1242 (415) 565-3000 / Fax: (415) 241-2746 WWW: http://www.wested.org/werc/

## WestEd Regional Educational Laboratory

WestEd identifies effective teaching techniques and school improvement efforts within the region and shares this information with State and local educators.

Dean H. Nafziger, Executive Director WestEd Regional Educational Laboratory 730 Harrison Street San Francisco, CA 94107-1242 (415) 565-3000 / Fax: (415) 565-3012

### ▶ Department of Energy (DOE)

### **Bechtel Nevada**

Bechtel Nevada offers college scholarships to selected science students and sponsors academic contests, outreach programs, science fairs, and a career day. Dawn Merritt, Communications Manager Bechtel Nevada Office of Public and Employee Communications PO Box 98521, M/S - 0039 Las Vegas, NV 89193-8521 (702) 295-5792 / Fax: (702) 295-1859 E-mail: meritdl@doe.nv.gov

### ▶ Department of the Interior (DOI)

### **Bureau of Land Management State Office**

This office provides information about educational programs, materials, and local land-management issues.

Education Coordinator Bureau of Land Management PO Box 12000, 850 Harvard Way Reno, NV 89520-0006 (702) 785-6586

### Bureau of Reclamation Environmental Education

A variety of environmental subjects, with an emphasis on water resources, is offered to teachers and students in grades K–12. Subjects vary from groundwater model to instant snow storms and wetlands in a pan. Programs are presented in the classroom as well as outdoors at laboratory schools, summer camps, and at some visitor centers. The program currently operates in the States of California, Colorado, Montana, Nevada, Idaho, and Utah.

Theresa Taylor, Environmental Education Program Assistant Denver Federal Center, D-5100 Building 67 Denver, CO 80225 (303) 236-9336, ext. 262 Fax: (303) 236-3573

# The Desert Tortoise Multi-Agency Exhibit Project: Win the Race Against Extinction

This is a multi-agency effort to provide California and Nevada public schools with educational materials. The exhibit includes portable display boards with photos and text, exhibit kits containing freeze-dried tortoise and tortoise shells showing predation and degradation, plants eaten by the tortoise, posters, videos, teacher guide, bookmarks, trading cards, etc.

Mary Webb, Writer/Editor Regional Office Division of Environment PO Box 61470 Boulder City, NV 61470 (702) 293-8704 / Fax: (702) 293-8023

#### **Great Basin National Park**

In addition to guided nature walks, the park offers a Junior Ranger Program that emphasizes ecology, conservation, and biology. A teacher's workshop is designed to orient local and regional educators to the opportunities and potentials of the Great Basin as an outdoor classroom.

Terry Baldino, Interpretive Specialist Great Basin National Park Baker, NV 89311 (702) 234-7331 / Fax: (702) 234-7269

#### **Hoover Dam**

The program Hoover Dam Helps Prepare Its Future is designed to educate the diverse public about our facilities by sharing awareness, knowledge, and hands-on experiences.

Linda Rivera, Special Program Assistant PO Box 60400 Boulder City, NV 89006-0400 (702) 293-8333 / Fax: (702) 293-8297

### Lake Mead National Recreation Area

Environmental educational programs are offered for grades 1–6. Pre- and post-visit curriculum materials are provided. For example, in Desert Connections, students are introduced to concepts that build on the previous grade material in an integrated curriculum that brings students into contact with the Mohave Desert. The program length is 2.5 hours in the park.

Kay Rhode, Chief of Interpretation Lake Mead National Recreation Area 601 Nevada Highway Boulder City, NV 89003 (702) 293-8918 / Fax: (702) 293-8936

## Project Water Education for Teachers (WET)

Project WET is an interdisciplinary water education program intended to supplement a school's existing curriculum. Classroom-ready teaching aides being developed include activity guides and modules for grades K-12, computer simulations, water-history publications, groundwater flow models, and a series of children's story and action books.

Everett A. Jesse, Administrator Division of Water Planning Capitol Complex, 123 West Nye Lane Carson City, NV 89710 (702) 687-3600



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### **Project WILD**

Project WILD offers teacher training and educational materials. Teacher guides, free to teachers who attend the training session, contain more than 80 supplementary, interdisciplinary activities for grades K-12.

Dave Sanger, Project WILD Coordinator Division of Wildlife 1100 Valley Road Reno, NV 89520 (702) 688-1555 / Fax: (702) 688-2939

Suzanne Sturtevant, Project WILD Coordinator Division of Wildlife 4747 West Vegas Drive Las Vegas, NV 89108 (702) 486-5127 / Fax: (702) 486-5133

## Stillwater National Wildlife Refuge

Junior Duck Stamp Design Contest promotes conservation and waterfowl learning through the arts. Students in grades K-12 enter art designs on waterfowl for competition at the State level. The winners go on to compete in the National contest.

Anne Janik, Wildlife Biologist Stillwater NWR PO Box 1236 Fallon, NV 89407 (702) 423-5128 / Fax: (702) 423-0416

## ► Department of Labor (DOL)

## Job Training Partnership Act (JTPA) Liaison

The JTPA Liaison can provide information about the Job Training Partnership Act State and local programs for economically disadvantaged adults and youth.

Barbara Weinberg, Executive Director Nevada State Job Training Office Capitol Complex, 400 West King Carson City, NV 89710 (702) 687-4310 / Fax: (702) 687-3957

### ► Department of Transportation (DOT)

## Federal Aviation Administration (FAA) Aviation Education

The FAA Aviation Education Representative coordinates aviation education services, including materials and programs for the FAA in the States assigned to the region.

Programs include the following:

- ▶ The Aviation Career Education (ACE)
  Academy is a one-week summer aviation
  education program for high school students sponsored by the FAA along with a
  host educational institution. The program
  provides students with diverse experiences
  in aviation career exploration. The focus
  is on aviation career clusters identified by
  FAA, with an emphasis on opportunities
  for women and minorities. A goal is to
  have one program in each State and U.S.
  Territory. The FAA will conduct regional
  leadership workshops and provide funds
  based on the availability of resources.
- ▶ Aviation Education Workshops for Teachers provide teachers with information on FAA aviation programs and materials and prepare them to teach aviation in the classroom. Annual workshops are conducted at colleges and universities across the Nation. The FAA provides information, materials, and speakers for the program.
- ▶ National Congress on Aviation and Space Education is sponsored annually by the FAA in partnership with the National Aeronautics and Space Administration and the Civil Air Patrol. The meeting includes teacher workshops and crosstalk sessions to exchange ideas on promoting aerospace education.

Sandi Couverley, AWP-17F, FAA Aviation Education Representative PO Box 92007 Worldway Postal Center Los Angeles, CA 90009 (310) 297-0556 / Fax: (310) 297-0706

### FAA Aviation Education Resource Centers

Located at colleges, museums, and State aviation authority offices, these centers function as information distribution centers for Federal Aviation Administration education materials and resources. The Resource Centers maintain and provide quantities of printed materials, videotapes, and computer educational software. Center personnel can also provide general information, conduct workshops, and make aviation-related presentations.

Frankie Lukasko Aviation Education Resource Center Galena High School Community Library 3600 Butch Cassidy Way Reno, NV 89511 (702) 851-5630

## ► Environmental Protection Agency (EPA)

### **EPA Regional Office**

This office takes part in a variety of environmental education programs for both teachers and students. Programs range from teacher workshops and student contests to in-school presentations. Information on environmental issues is also available through the Public Information Center located at the office.

Stacey Benfer, Environmental Education Coordinator Environmental Protection Agency 75 Hawthorne Street (E-2) San Francisco, CA 94105 (415) 744-1586 / Fax: (415) 744-1605

## The President's Environmental Youth Awards (PEYA) Program

Young people from each State are invited to participate in PEYA, a nationwide program designed to encourage individuals, school classes, summer camps, public interest groups, and youth organizations to promote environmental awareness and community involvement. The two components of the program are the regional certificate program and the National awards competition. Regional certificates, signed by the President, are awarded to each participant by EPA regional offices. National individual project winners, or one representative from a National awardwinning group project, along with one sponsor, are honored at EPA headquarters, Washington, DC. Interested K-12 individuals or groups may obtain application materials and contest rules by contacting the EPA Regional Office that serves their State. PEYA has been an ongoing project since it was created by the White House Office of Education and the EPA in 1971.

EPA Region 9 75 Hawthorne Street (E-2) San Francisco, CA 94105 (415) 744-1582 / Fax: (415) 744-1605

### National Aeronautics and Space Administration (NASA)

### **NASA Educator Resource Center**

The center has NASA-related educational materials in various formats, including laserdiscs, CD-ROMs, videotapes, slides, audiotapes, publications, and teacher guides. Educators may preview or copy NASA materials upon request.



NASA Ames Research Center Educator Resource Laboratory Educator Resource Center Mail Stop T12-A Moffett Field, CA 94035-1000 (415) 604-3574

#### **NASA Field Centers**

Each field center has an educational programs officer who is responsible for precollege education programs. In addition to administering National programs, the center offers programs and services to meet regional and local needs.

Garth A. Hull, Chief Educational Programs Branch NASA Ames Research Center, MS 204-12 Moffett Field, CA 94035 (415) 604-5543

## NASA Regional Educator Resource Center (RERC)

To offer more educators the opportunity to visit the Educator Resource Center Network (ERCN), NASA forms partnerships with planetariums, universities, museums, and other nonprofit organizations to serve as RERCs. Teachers may preview or copy NASA materials upon request.

Community College of Southern Nevada NASA/Nevada Regional Teacher Resource Center-C2A Learning Resource Center, Room 2100F 3200 East Cheyenne Avenue North Las Vegas, NV 89030-4296 (702) 651-4505

### **Space Grant Consortium**

The Space Grant Consortium in each State consists of colleges, universities, industry, and other organizations that have an interest in aeronautics and space education. Each consortium receives NASA funds for use in implementing a balanced program of research, education, and public service.

Nevada Space Grant Consortium Desert Research Institute 755 East Flamingo Road, Room 285 Las Vegas, NV 89132-0400 (702) 895-0408

### Utah

### ▶ Department of Agriculture (USDA)

### 4-H State Leader

The State 4-H Youth Development Programs are administered by the Cooperative Extension Service at land-grant universities. State 4-H leaders coordinate outreach services and training to all county offices.

John Paul Murphy, State 4-H Program Leader Utah State University Logan, UT 84322-4900 (801) 797-2199 / Fax: (801) 797-3268 E-mail: johnm@ext.usu.edu

### Ag in the Classroom State Leader

This program promotes increased understanding of agriculture and possible careers in the agricultural sciences. With National leadership provided by USDA, each State manages its own programs, with assistance from agribusiness, educational institutions, and government.

Debra Spielmaker Utah State University UMC 2315 Logan, UT 84322-2315 (801) 797-1657 / Fax: (801) 538-7126

## ► Department of Defense (DoD)

### Hill Aerospace Museum

The museum exhibits the history and technology involved in both aeronautics and aerospace. Tours and previsit curriculum materials are available upon request.

Hill Aerospace Museum 7961 Wardleigh Road 75ABG / MU Hill Air Force Base, UT 84056-5842 (801) 777-6868

## ► Department of Education (ED)

#### Eisenhower State Coordinators

Eisenhower State Coordinators administer the Eisenhower Professional Development Program State Formula grants. The program focuses on sustained and intensive high-quality professional development through inservice programs.

Brett Moulding Eisenhower Professional Development Program Utah Department of Education 250 East 500 South Salt Lake City, UT 84111 (801) 538-7791 / Fax: (801) 538-7769

## **Eisenhower State Coordinators** for Higher Education

Eisenhower State Coordinators oversee the Eisenhower Professional Development State Formula Grants for the State Agency for Higher Education (SAHE). The program focuses on teacher enhancement through both inservice and preservice programs.

Dr. Phyliss Safman, Assistant Commissioner Eisenhower Professional Development Program Utah State Board of Regents Three Triad Center, Suite 550 Salt Lake City, UT 84180-1205 (801) 321-7101 / Fax: (801) 321-7199

# Pacific and Southwest Regional Technology in Education Consortium (PSR\*TEC)

ED established the Regional Technology in Education Consortia (R\*TEC) program in the fall of 1995 to help States, districts, schools, adult literacy centers, and other educational institutions use advanced technology to support improved teaching and student achievement. R\*TEC's role in educational technology is unique in two ways: the emphasis is regional and the primary goal is to ensure that technology is used effectively to support school reform. Program strategies include professional development, technical assistance, and information dissemination.

Kevin Rocap, Director
PSR\*TEC
Center for Language Minority Education &
Research
c/o College of Education
California State University, Long Beach
1250 Bellflower Boulevard
Long Beach, CA 90840-2201
(310) 985-1570 / Fax: (310) 985-4528
E-mail: krocap@csulb.edu
WWW: http://www.csulb.edu/~clmer/
pswrtc/pswrtc.html

Neal Kaske, R\*TEC Project Officer U.S. Department of Education Office of Educational Research and Improvement Office of Library Programs, Room 300h 555 New Jersey Avenue NW Washington, DC 20208-5571 (202) 219-1871 E-mail: nkaske@inet.ed.gov



# WestEd Eisenhower Regional Consortium for Science and Mathematics Education

The Eisenhower Regional Consortium provides information and technical assistance to help States and school districts improve mathematics and science education.

Art Sussman and Steve Schneider, Co-Directors

WestEd Eisenhower Regional Consortium for Science and Mathematics Education 730 Harrison Street
San Francisco, CA 94107-1242
(415) 565-3000 / Fax: (415) 241-2746
WWW: http://www.wested.org/werc/

## WestEd Regional Educational Laboratory

WestEd identifies effective teaching techniques and school improvement efforts within the region and shares this information with State and local educators.

Dean H. Nafziger, Executive Director WestEd Regional Educational Laboratory 730 Harrison Street San Francisco, CA 94107-1242 (415) 565-3000 / Fax: (415) 565-3012

## ► Department of Energy (DOE)

### Western Area Power Administration (WAPA)

WAPA conducts the Regional Science Bowl, an academic competition sponsored by DOE and the community. Held each February, the Bowl encourages the study of science and mathematics and the pursuit of related careers. The regional winner advances to the National competition, held each spring in Washington, DC.

David Howell Western Area Power Administration—Salt Lake City 257 East 200 South, Suite 475 Salt Lake City, UT 84111 (801) 524-6024 / Fax: (801) 524-5017

### ▶ Department of the Interior (DOI)

#### Bear River Migratory Bird Refuge

Participants in the 4-H Wildlife Habitat Evaluation Contest learn and apply wildlife management concepts and principles in a five-part contest. Junior and senior divisions allow participation of a large range of age groups. The State contest is held annually.

Other programs include the following:

- ▶ High Summer Camp is an interagency effort between Federal and State land management agencies and the Utah State University to introduce high school students to college requirements and career opportunities in natural resource fields. The program is specifically designed to interest workforce diversity candidates in natural resource careers.
- Wetland Education Trunks contains lesson guides, materials, and equipment for in-classroom and onsite exploration of wetlands. Everything is packaged in a trunk and shipped from school to school. Lessons are grade-specific and encourage outside exploration.

Mark Lanier, Refuge Operations Specialist Vickie Roy, Wildlife Biologist Bear River Migratory Bird Refuge 866 South Main Brigham City, UT 84302 (801) 723-5887 / Fax: (801) 723-8873

### **Bryce Canyon National Park**

Classroom and in-park activities are centered on geology and natural and cultural history of the park.

Susan Colclazer, Chief of Interpretation Bryce Canyon National Park Bryce Canyon, UT 84717 (801) 834-5322 / Fax: (801) 834-5215 E-mail: Susan Colclazer@nps.gov

## **Bureau of Land Management State Office**

This office provides information about educational programs, materials, and local land-management issues.

Jeanne Moe, Archaeologist Bureau of Land Management PO Box 45155 Salt Lake City, UT 84145-0155 (801) 539-4060 (800) 722-3988

### Bureau of Reclamation Environmental Education

A variety of environmental subjects, with an emphasis on water resources, is offered to teachers and students in grades K–12. Subjects vary from groundwater model to instant snow storms and wetlands in a pan. Programs are presented in the classroom as well as outdoors at laboratory schools, summer camps, and at some visitor centers. The program currently operates in the States of California, Colorado, Montana, Nevada, Idaho, and Utah.

Theresa Taylor, Environmental Education Program Assistant Denver Federal Center, D-5100 Building 67 Denver, CO 80225 (303) 236-9336, ext. 262 Fax: (303) 236-3573

### Capitol Reef National Park

The park offers a Teacher's Resource Guide, a workbook offering lesson plans and slide sets to teach the following topics: archaeology, geology, desert flora/fauna, pioneer history, and National Park Service.

Diane Gifford, Education Outreach Coordinator Capitol Reef National Park Torrey, UT 84775 (801) 425-3791 / Fax: (801) 425-3791

#### **Dinosaur National Monument**

Onsite student programs and in-school presentations target primarily students in grades 3–6. Information is provided on resource issues related to school curricula.

Division of Interpretation Dinosaur National Monument PO Box 128 Jensen, UT 84035 (970) 374-3000

### **DOI** Regional Office

In the Groundwater Model Demonstration and Lecture, individuals visit schools and groups to provide a demonstration of a groundwater flow model. They discuss all aspects of groundwater management issues. The model is a "cut-away," which allows people to see why and how water moves, effects of pumping, and pollution.

The Water Education Calendar program publishes original artwork on water themes by Utah school children. The calendar includes teacher lessons and activities on water education topics.

Barry Wirth, Public Affairs Officer Salt Lake City Regional Office 125 S. State Street, Room 7006 Salt Lake City, UT 84138-1102 (801) 524-6477 / Fax: (801) 524-3336

## Earth Science Information Center, Salt Lake City

The center offers information and sales service for U.S. Geological Survey map products and Earth science publications.

Salt Lake City Earth Science Information Center 125 South State Street 8105 Federal Building Salt Lake City, UT 84138-1177 (801) 524-5652



### Flaming Gorge Dam

Located on the Green River, the Visitor Center offers guided and self-guided tours. Brochures in Braille and headphones are provided for individuals with visual impairments.

Jayne Kelleher Public Affairs Office Upper Colorado Region Bureau of Reclamation PO Box 11568 (UC-140) Salt Lake City, UT 84147-0568 (801) 524-6039

### Jordanelle Reservoir

The Visitor Center offers interpretive programs and nature trails.

Jayne Kelleher Public Affairs Office Upper Colorado Region Bureau of Reclamation PO Box 11568 (UC-140) Salt Lake City, UT 84147-0568 (801) 524-6039

## Project Water Education for Teachers (WET)

Project WET is an interdisciplinary water education program intended to supplement a school's existing curriculum. Classroom-ready teaching aides being developed include activity guides and modules for grades K–12, computer simulations, water-history publications, groundwater flow models, and a series of children's story and action books.

Virginia Jensen Department of Natural Resources Division of Water Resources 1636 West North Temple, Suite 310 Salt Lake City, UT 84116-3156 (801) 538-7299

### **Project WILD**

Project WILD offers teacher training and educational materials. Teacher guides, free to teachers who attend the training session, contain more than 80 supplementary, interdisciplinary activities for grades K–12.

Bob Ellis, Project WILD Coordinator Utah Division of Wildlife Resources 1596 West North Temple Salt Lake City, UT 84116-3195 (801) 538-4720 / Fax: (801) 538-4709

#### Strawberry Reservoir

Guided and self-guided nature trails are available at the Strawberry Reservoir Visitor Center.

Jayne Kelleher Public Affairs Office Upper Colorado Region Bureau of Reclamation PO Box 11568 (UC-140) Salt Lake City, UT 84147-0568 (801) 524-6039

### Zion National Park

Programs include guided nature walks that focus primarily on environmental education. A Junior Ranger Program is also available.

Zion Outreach Programs provide curriculumbased, hands-on educational programs to local area schools. The current programs target grades 1–6. The program consists of preand post-visit information and materials available to the teachers and an onsite visit by a ranger or a field trip to the park.

Andrea Bornemeier Park Ranger—Education Director Zion National Park Springdale, UT 84767 (801) 772-3256 / Fax: (801) 772-3426

## ► Department of Labor (DOL)

## Job Training Partnership Act (JTPA) Liaison

The JTPA Liaison can provide information about the Job Training Partnership Act State and local programs for economically disadvantaged adults and youth.

Gregory B. Gardner, Director Office of Job Training for Economic Development 324 South State Street, Suite 500 Salt Lake City, UT 84114-7162 (801) 538-8750 / Fax: (801) 359-3928

## ► Department of Transportation (DOT)

## Federal Aviation Administration (FAA) Aviation Education

The FAA Aviation Education Representative coordinates aviation education services, including materials and programs for the FAA in the States assigned to the region.

Programs include the following:

► The Aviation Career Education (ACE)
Academy is a one-week summer aviation
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- ▶ Aviation Education Workshops for Teachers provide teachers with information on FAA aviation programs and materials and prepare them to teach aviation in the classroom. Annual workshops are conducted at colleges and universities across the Nation. The FAA provides information, materials, and speakers for the program.
- ▶ National Congress on Aviation and Space Education is sponsored annually by the FAA in partnership with the National Aeronautics and Space Administration and the Civil Air Patrol. The meeting includes teacher workshops and crosstalk sessions to exchange ideas on promoting aerospace education.

Herman Payton, ANM-14A, FAA Aviation Education Representative 1601 Lind Avenue SW Renton, WA 98055-4056 (206) 227-2079 / Fax: (206) 227-1010

### FAA Aviation Education Resource Centers

Located at colleges, museums, and State aviation authority offices, these centers function as information distribution centers for Federal Aviation Administration education materials and resources. The Resource Centers maintain and provide quantities of printed materials, videotapes, and computer educational software. Center personnel can also provide general information, conduct workshops, and make aviation-related presentations.

Dr. P.R. Ron Smart, Director Aviation Education Resource Center Utah Valley State College Aviation Science Department 800 West 1200 South Orem, Utah 84058-5999 (801) 222-8000, ext. 8436

## ► Environmental Protection Agency (EPA)

#### **EPA** Regional Office

This office takes part in a variety of environmental education programs for both teachers and students. Programs range from teacher



workshops and student contests to in-school presentations. Information on environmental issues is also available through the Public Information Center located at the office.

Cece Forget, Environmental Education Coordinator Environmental Protection Agency One Denver Place (OCPI) 999 18th Street, Suite 500 Denver, CO 80202-2405 (303) 312-6605 / Fax: (303) 312-6961

## The President's Environmental Youth Awards (PEYA) Program

Young people from each State are invited to participate in PEYA, a nationwide program designed to encourage individuals, school classes, summer camps, public interest groups, and youth organizations to promote environmental awareness and community involvement. The two components of the program are the regional certificate program and the National awards competition. Regional certificates, signed by the President, are awarded to each participant by EPA regional offices. National individual project winners, or one representative from a National awardwinning group project, along with one sponsor, are honored at EPA headquarters in Washington, DC. Interested K-12 individuals or groups may obtain application materials and contest rules by contacting the EPA Regional Office that serves their State. PEYA has been an ongoing project since it was created by the White House Office of Education and the EPA in 1971.

EPA Region 8 999 18th Street Denver, CO 80202-2466 (303) 312-6605 / Fax: (303) 312-6961

# ► National Aeronautics and Space Administration (NASA)

#### **NASA Educator Resource Center**

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NASA Ames Research Center Educator Resource Laboratory Educator Resource Center, MS T12-A Moffett Field, CA 94035-1000 (415) 604-3574

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Weber State University NASA Regional Educator Resource Center Curriculum Library, College of Education Ogden, UT 84408-1302 (801) 626-7614/6279

Utah State University College of Education NASA Regional Educator Resource Center Logan, UT 84322-2845 (801) 797-3377

### **Space Grant Consortium**

The Space Grant Consortium in each State consists of colleges, universities, industry, and other organizations that have an interest in aeronautics and space education. Each consortium receives NASA funds for use in implementing a balanced program of research, education, and public service.

Rocky Mountain Space Grant Consortium Utah State University Department of Electrical Engineering USU/EL 302 UMC Logan, UT 84322-4436 (801) 750-1592

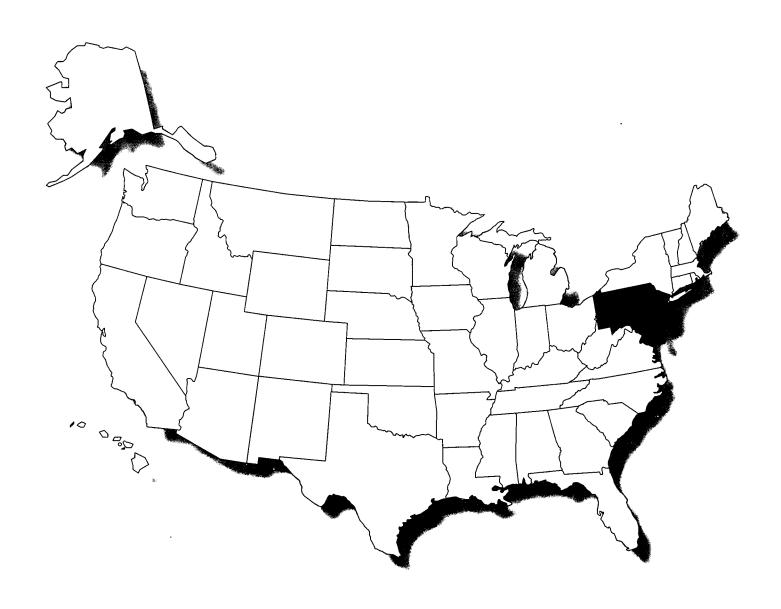


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- **▶** Delaware
- **▶** District of Columbia
- ▶ Maryland
- **▶** New Jersey
- **▶** Pennsylvania



Mid-Atlantic Eisenhower Consortium for Mathematics and Science Education





# Mid-Atlantic Eisenhower Consortium for Mathematics and Science Education



The Mid-Atlantic Eisenhower Consortium for Mathematics and Science Education is one of 10 established by the U.S. Department of Education. Along with the Eisenhower National Clearinghouse for Mathematics and Science Education (ENC) at The Ohio State University, the Regional Consortia form a coordinated, field-based National infrastructure to promote mathematics and science improvement. The Consortia are designed to address the realization that past mathematics and science reform efforts have been piecemeal and isolated events, and that a new approach is needed if U.S. students, indeed, are to be first in the world in mathematics and science achievement. The Mid-Atlantic Eisenhower Consortium is housed at Research for Better Schools (RBS) in Philadelphia.

#### Mission

The Consortium's primary mission—to support improvement in mathematics and science education by providing technical assistance and training, disseminating exemplary materials, and coordinating resources within the Mid-Atlantic region—engages groups and individuals at all levels of the educational system to help improve student performance. Technology is included as an important tool for instruction and communications among Consortium partners.

The Mid-Atlantic region is particularly rich in human technical assistance and knowledgebased resources in mathematics and science. Individuals and organizations assume active leadership roles in the Consortium teams established in each State. They include representatives from both public and private schools, State education departments, institutions of higher education, business and industry, State mathematics and science coalitions, professional associations, and such informal educational agencies as the Franklin Institute in Philadelphia and the Carnegie Science Center in Pittsburgh. These individuals and organizations bring years of experience and enormous insight into providing the technical assistance and knowledge resources so greatly needed to support the improvement of mathematics and science education.

### Statewide Efforts

Through teams in each State, the Consortium sponsors technical assistance and professional development on programs and practices that embody high-performance standards, curriculum frameworks, and alternative assessment. This assistance is delivered through intensive workshops, conferences, and onsite consultation.

For example, in Delaware over the past several years, the Consortium has sponsored inservice workshops in mathematics and science that are consistent with the State's vision of new directions for education in Delaware. In the District of Columbia, the Consortium is supporting the DC Mathematics, Science, Technology Initiative (DC-MSTI). In Maryland, the Consortium has sponsored regional conferences on standards and assessment in mathematics and science education for teachers and principals. In New Jersey, the Consortium, in close collaboration with the SSI, is sponsoring public awareness activities and development of statewide science curriculum frameworks. In Pennsylvania, the Consortium has sponsored professional development programs on various topics, including elementary science teaching, equity, and the development of within-State mathematics and science collaboratives.

### **Regional Efforts**

On a regional level, the Consortium publishes a newsletter on mathematics and science education that is distributed to 50,000 educators, thereby reaching every school building. In addition, the Consortium develops electronic resources to serve educators. These resources may be accessed through the RBS World Wide Web site, which provides detailed information about Consortium activities, services, and products, and enables users to access an extensive variety of local, regional, and National mathematics and science education resources. The Consortium also promotes communication and networking among State teams, regional groups, and educators through electronic networks and forums.

The Consortium also develops publications. For example, two publications that summarize the eighth and fourth grade results from the Third International Mathematics and Science Study (TIMSS) are currently being prepared. *Internet Jones*, an illustrated guide that helps

educators understand the Internet and how it can be used in the classroom, has been completed and disseminated extensively throughout the country.

Finally, other means of communication include Mid-Atlantic regional conferences for Consortium members, State and National conference presentations, Consortium State team meetings, and information via telephone and mail.

Collaboration among the States of the region, as well as with the other Consortia and ENC, results in a whole effort that is greater than the sum of its parts. Many coordinated resources are used to achieve the goal of improved mathematics and science education in the Mid-Atlantic region.

Dr. Keith M. Kershner, Director

Dr. William Geppert, Senior Mathematics Associate and Pennsylvania Team Liaison

**Dr. Patricia Wang-Iverson,**Senior Science Associate and DC Team Liaison

Dr. John Connolly, New Jersey Team Liaison

**Dr. Louis M. Maguire,**Maryland and Delaware Team Liaison

Stephen Bouikidis, Dissemination Specialist

Peter Donahoe, Resource Center Coordinator

Dr. Susan Danin, Evaluator

Ronnen Miller, Manager of Information Systems

Tom Lorenz,
Multimedia Information Systems Specialist

Mid-Atlantic Eisenhower Consortium for Mathematics and Science Education Research for Better Schools 444 North Third Street Philadelphia, PA 19123 (215) 574-9300, ext. 280 Fax: (215) 574-0133 E-mail: mathsci@rbs.org WWW: http://www.rbs.org/eisenhower



### **Delaware**

### ▶ Department of Agriculture (USDA)

### 4-H State Leader

The State 4-H Youth Development Programs are administered by the Cooperative Extension Service at land-grant universities. State 4-H leaders coordinate outreach services and training to all county offices.

Joy G. Sparks, Interim Assistant Director 4-H Youth Development 122 Townsend Hall, University of Delaware Newark, DE 19717-1303 (302) 831-2509 / Fax: (302) 831-3651 E-mail: joy.sparks@mvs.udel.edu

### Ag in the Classroom State Leader

This program promotes increased understanding of agriculture and possible careers in the agricultural sciences. With National leadership provided by USDA, each State manages its own programs, with assistance from agribusiness, educational institutions, and government.

Anne T. Fitzgerald Delaware AIIC Delaware Department of Agriculture 2320 South DuPont Highway Dover, DE 19901 (302) 739-4811, ext. 279 Fax: (302) 697-6287

### Youth Enrichment Program

Sponsored by the Agricultural Research Service, this program provides first-hand science experience for more than 100 high school students interested in attending college and pursuing science careers.

Rosanna Taylor, Manager U.S. Department of Agriculture Office of the Administrator Special Programs, Room 3552-S 1400 Independence Avenue SW Washington, DC 20250-0301 (202) 720-3511

### **▶ Department of Commerce** (DOC)

### **Delaware National Estuarine** Research Reserve

Ecological and environmental education programs for both students and teachers are offered at the reserve.

Tina Bernat, Education Coordinator Delaware National Estuarine Research Delaware Department of Natural Resources and Environmental Control PO Box 1401 Dover, DE 19903 (302) 739-3451 / Fax: (302) 739-3817

### National Sea Grant College Program, Operation Pathfinder

The program consists of two-week summer courses that present an introduction to oceanographic and coastal processes. Courses are available in six regions and are designed to enhance skills in science teaching.

Bill Hall Delaware Sea Grant 700 Pilottown Road Lewes, DE 19958 (302) 645-4253 / Fax: (302) 645-4007

## **▶** Department of Education

#### **Eisenhower State Coordinators**

Eisenhower State Coordinators administer the Eisenhower Professional Development Program State Formula grants. The program focuses on sustained and intensive high-quality professional development through inservice programs.

**Jack Cairns** Eisenhower Professional Development Program Delaware Department of Public Instruction John G. Townsend Building, PO Box 1402 Dover, DE 19903 (302) 739-3742 / Fax: (302) 739-4483

### **Eisenhower State Coordinators** for Higher Education

Eisenhower State Coordinators oversee the Eisenhower Professional Development State Formula Grants for the State Agency for Higher Education (SAHE). The program focuses on teacher enhancement through both inservice and preservice programs.

Dr. Paul LeMahieu Eisenhower Professional Development University of Delaware, College of Education 101A Willard Hall Newark, DE 19716 (302) 831-4433 / Fax: (302) 831-4438

### Mid-Atlantic Eisenhower Consortium for Mathematics and Science Education

The Eisenhower Regional Consortium provides information and technical assistance to help States and school districts improve mathematics and science education.

Keith Kershner, Director Mid-Atlantic Eisenhower Consortium for Mathematics and Science Education 444 North Third Street Philadelphia, PA 19123-4107 (215) 574-9300 / Fax: (215) 574-0133 E-mail: kershner@rbs.org WWW: http://www.rbs.org/eisenhower/

### Mid-Atlantic Laboratory for Student Success (LSS)

LSS identifies effective teaching techniques and school improvement efforts within the region and shares this information with State and local educators.

Dr. Margaret Wang, Executive Director Laboratory for Student Success Temple University Center for Research in Human Development and Education 933 Ritter Annex 1301 Cecil B. Moore Avenue Philadelphia, PA 19122-6091 (215) 204-3030 or (800) 892-5550 Fax: (215) 204-5130 WWW: http://www.temple.edu/ departments/LSS

### Northeast Regional Technology in Education Consortium (NetTech)

ED established the Regional Technology in Education Consortia (R\*TEC) program in the fall of 1995 to help States, districts, schools, adult literacy centers, and other educational institutions use advanced technology to support improved teaching and student achievement. R\*TEC's role in educational technology is unique in two ways: the emphasis is regional and the primary goal is to ensure that technology is used effectively to support school reform. Program strategies include professional development, technical assistance, and information dissemination.



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Bonnie Brownstein and Michael Ribaudo, Co-Directors NetTech City University of New York 555 West 57th Street New York, NY 10019 (212) 541-0972 / Fax: (212) 541-0357 E-mail: blbbh@cunyvm.cuny.edu WWW: http://www.nettech.org/

Kathy Fuller, R\*TEC Project Officer U.S. Department of Education Office of Educational Research and Improvement ORAD/SLSD, Room 506c 555 New Jersey Avenue NW Washington, DC 20208-5644 (202) 219-2281 E-mail: Kathy\_Fuller@ed.gov

## Department of the Interior (DOI)

## Bombay Hook National Wildlife Refuge

Programs at the refuge include guided tours and lectures that center on wildlife management. Habitat studies programs are also available. For example, in Forest Studies, students are instructed on the forest ecology of the refuge. In Meadow Studies, students use nets to sweep a meadow area for insects and other invertebrates, occasionally finding a herptile. Students also learn flower identification. They classify what they find and compare it to what they find at the edge of the meadow and forest.

Wetland Habitat includes studies of freshwater, brackish water, salt marshes, and the bay. Tools students use include dip and seine nets to sample organisms, field guides for identification of plants and animals, water test kits, collection jars and pans. The students use data sheets and lesson plans to record their observations.

Refuge staff occasionally (mostly during the winter) present offsite programs at schools, clubs, and other community sites. These talks can be on general wildlife topics (for example, covering the major classes of animals and their characteristics and adaptations; endangered species; raptors; wetlands; Bombay Hook). The programs include movies or slide shows and animal mounts for viewing.

Marian Johnson-Pohlman, Outdoor Recreation Planner Bombay Hook NWR 2591 Whitehall Neck Road Smyrna, DE 19977 (302) 653-6872 / Fax: (302) 653-0684 E-mail: r5rw\_bhr@mail.fws.gov

### Bureau of Land Management Eastern States Office

This office provides information about educational programs, materials, and local landmanagement issues.

Education Coordinator Bureau of Land Management 7450 Boston Boulevard Springfield, VA 22153 (703) 440-1713

### Minerals Management Service (MMS) Regional Office

The MMS Regional Office provides a range of educational services. Teacher inservice programs and classroom visitations may include supplemental materials. Availability may be limited, but arrangements may be made for duplication of some materials at minimal cost.

Office of Communications and Governmental Affairs

Education Coordinator Minerals Management Service 1849 C Street NW, LMS4230 Washington, DC 20240-0001 (202) 208-3985 / Fax: (202) 208-3968

Offshore Minerals Management Technical Communications Service Minerals Management Service 381 Eldon Street, MS 4530 Herndon, VA 20170-4817 (703) 787-1080 / Fax: (703) 787-1186

### **Project WILD**

Project WILD offers teacher training and educational materials. Teacher guides, free to teachers who attend the training session, contain more than 80 supplementary, interdisciplinary activities for grades K-12.

Nancy Rolli, Project WILD Coordinator Department of Natural Resources, I and E PO Box 1401 Dover, DE 19903 (302) 739-4506 / Fax: (302) 294-0874

## ► Department of Labor (DOL)

## Job Training Partnership Act (JTPA) Liaison

The JTPA Liaison can provide information about the Job Training Partnership Act State and local programs for economically disadvantaged adults and youth.

Louis A. Masci, Director Delaware Department of Labor Division of Employment and Training University Plaza, PO Box 9499 Newark, DE 19714-9499 (302) 368-6810 / Fax: (302) 368-6995

## ► Department of Transportation (DOT)

## Federal Aviation Administration (FAA) Aviation Education

The FAA Aviation Education Representative coordinates aviation education services, including materials and programs for the FAA in the States assigned to the region.

Programs include the following:

- ▶ The Aviation Career Education (ACE)
  Academy is a one-week summer aviation
  education program for high school students sponsored by the FAA along with a
  host educational institution. The program
  provides students with diverse experiences
  in aviation career exploration. The focus
  is on aviation career clusters identified by
  FAA, with an emphasis on opportunities
  for women and minorities. A goal is to
  have one program in each State and U.S.
  Territory. The FAA will conduct regional
  leadership workshops and provide funds
  based on the availability of resources.
- ▶ Aviation Education Workshops for Teachers provide teachers with information on FAA aviation programs and materials and prepare them to teach aviation in the classroom. Annual workshops are conducted at colleges and universities across the Nation. The FAA provides information, materials, and speakers for the program.
- ▶ National Congress on Aviation and Space Education is sponsored annually by the FAA in partnership with the National Aeronautics and Space Administration and the Civil Air Patrol. The meeting includes teacher workshops and crosstalk sessions to exchange ideas on promoting aerospace education.

Jim Szakary, AEA-61, FAA Aviation Education Representative JFK International Airport Federal Building, #111 Jamaica, NY 11430 (718) 553-3364 / Fax: (718) 553-1455

### FAA Aviation Education Resource Centers

Located at colleges, museums, and State aviation authority offices, these centers function as information distribution centers for



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Federal Aviation Administration education materials and resources. The Resource Centers maintain and provide quantities of printed materials, videotapes, and computer educational software. Center personnel can also provide general information, conduct workshops, and make aviation-related presentations.

Stephanie Wright Aviation Education Resource Center Delaware Teachers Center Claymont Education Campus 3401 Green Street Claymont, DE 19703 (302) 798-3806

## ► Environmental Protection Agency (EPA)

### **EPA Regional Office**

This office takes part in a variety of environmental education programs for both teachers and students. Programs range from teacher workshops and student contests to in-school presentations. Information on environmental issues is also available through the Public Information Center located at the office.

Bonnie Smith and Nan Ides, Environmental Education Coordinators Environmental Protection Agency 841 Chestnut Street (3EA20) Philadelphia, PA 19107 (215) 566-5546 / Fax: (215) 566-5102

## The President's Environmental Youth Awards (PEYA) Program

Young people from each State are invited to participate in PEYA, a nationwide program designed to encourage individuals, school classes, summer camps, public interest groups, and youth organizations to promote environmental awareness and community involvement. The two components of the program are the regional certificate program and the National awards competition. Regional certificates, signed by the President, are awarded to each participant by EPA regional offices. National individual project winners, or one representative from a National awardwinning group project, along with one sponsor, are honored at EPA headquarters in Washington, DC. Interested K-12 individuals or groups may obtain application materials and contest rules by contacting the EPA Regional Office that serves their State. PEYA has been an ongoing project since it was created by the White House Office of Education and the EPA in 1971.

EPA Region 3 81 Chestnut Street (3EA20) Philadelphia, PA 19107 (215) 566-5543 / Fax: (215) 566-5102

### ► National Aeronautics and Space Administration (NASA)

#### **NASA Educator Resource Center**

The center has NASA-related educational materials in various formats, including laser discs, CD-ROMs, videotapes, slides, audiotapes, publications, and teacher guides. Educators may preview or copy NASA materials upon request.

Educator Resource Laboratory NASA Goddard Space Flight Center Mail Code 130.3 Greenbelt, MD 20771-0001 (301) 286-8570

### **NASA Field Centers**

Each field center has an educational programs officer who is responsible for precollege education programs. In addition to administering National programs, the center offers programs and services to meet regional and local needs.

Education Programs NASA Goddard Space Flight Center Mail Code 130 Greenbelt, MD 20771-0001 (301) 286-7206

### NASA Regional Educator Resource Center (RERC)

To offer more educators the opportunity to visit the Educator Resource Center Network (ERCN), NASA forms partnerships with planetariums, universities, museums, and other nonprofit organizations to serve as RERCs. Teachers may preview or copy NASA materials upon request.

Delaware Aerospace Center NASA Regional Educator Resource Center 500 Duncan Road Wilmington, DE 19809-2359 (302) 792-3806

### **Space Grant Consortium**

The Space Grant Consortium in each State consists of colleges, universities, industry, and other organizations that have an interest in aeronautics and space education. Each consortium receives NASA funds for use in implementing a balanced program of research, education, and public service.

Delaware Space Grant Consortium Bartol Research Institute University of Delaware 217 Sharp Laboratory Newark, DE 19716-4793 (302) 831-1094

# District of Columbia

### ▶ Department of Agriculture (USDA)

### 4-H State Leader

The State 4-H Youth Development Programs are administered by the Cooperative Extension Service at land-grant universities. State 4-H leaders coordinate outreach services and training to all county offices.

Dr. Corine Thomas, Acting Program Leader University of the District of Columbia 901 Newton Street NE Washington, DC 20017 (202) 274-6926 / Fax: (202) 274-6930

### Youth Enrichment Program

Sponsored by the Agricultural Research Service, this program provides first-hand science experience for more than 100 high school students interested in attending college and pursuing science careers.

Rosanna Taylor, Manager U.S. Department of Agriculture Office of the Administrator Special Programs, Room 3552-S 1400 Independence Avenue SW Washington, DC 20250-0301 (202) 720-3511

## ► Department of Commerce (DOC)

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The program consists of two-week summer courses that present an introduction to oceanographic and coastal processes. Courses are available in six regions and are designed to enhance skills in science teaching.

Bill Hall Delaware Sea Grant 700 Pilottown Road Lewes, DE 19958 (302) 645-4253 / Fax: (302) 645-4007



### Department of Defense (DoD)

### The Navy Museum

The museum chronicles the history of the United States Navy from the Revolution to the present. User friendly and interactive, the exhibits offer a hands-on approach to interpreting the development of naval weaponry and technology. Curriculum-related tours and programs are available for grades 1–12, by reservation.

The Navy Museum Building 76, Washington Navy Yard 901 M Street SE Washington, DC 20374-5060 (202) 433-4882 / Fax: (202) 433-8200

## Science and Engineering Apprentice Program

This program, supported by DoD and administered by The George Washington University, is designed to provide research experience for high school students attending school near the participating research facility. Each student works with a senior scientist or engineer who acts as a mentor for eight weeks during the summer. Participating organizations located in the District of Columbia are Armed Forces Institute of Pathology (AFIP), Naval Research Laboratory, United States Naval Observatory (USNO), and Walter Reed Army Institute of Research (WRAIR).

Marylin Krupsaw GWU/SEAS Science and Engineering Apprentice Program 707 22nd Street NW Washington, DC 20052 (202) 994-2234

### Walter Reed Army Institute of Research

The institute offers science and engineering internships for high school students.

Marvin Rogul, Associate Director Research Marketing and Policy Development Walter Reed Army Institute of Research Washington, DC 20307-5100 (202) 782-7580

## Washington Navy Yard, Washington, DC

The Navy Community Service Program forms partnerships with schools and other youth organizations throughout the National Capital region.

COMNAVDIST, Washington, DC Commander Naval District Washington Washington Navy Yard, Building 200 Code OOG 901 M Street SE Washington, DC 20374-2002 (202) 433-3728

## ► Department of Education (ED)

### **Eisenhower State Coordinators**

Eisenhower State Coordinators administer the Eisenhower Professional Development Program State Formula grants. The program focuses on sustained and intensive high-quality professional development through inservice programs.

Dr. Bonnie M. Smith
Eisenhower Professional Development
Program
DC Public Schools
415 12th Street NW, Room 1004
Washington, DC 20004
(202) 724-4234 / Fax: (202) 727-2739

Charles Geboe Eisenhower Professional Development Program Department of the Interior, BIA 1849 C Street NW, MS 3512, MIB Washington, DC 20240 (202) 219-1127 / Fax: (202) 219-9583

## **Eisenhower State Coordinators** for Higher Education

Eisenhower State Coordinators oversee the Eisenhower Professional Development State Formula Grants for the State Agency for Higher Education (SAHE). The program focuses on teacher enhancement through both inservice and preservice programs.

Edward Yearwood
Eisenhower Professional Development
Program
Office of Postsecondary Education Research
and Assistance
2100 Martin Luther King, Jr. Avenue SE
Suite 401
Washington, DC 20020
(202) 727-3685 / Fax: (202) 727-2739

Charles Geboe Eisenhower Professional Development Program Department of the Interior, BIA 1849 C Street NW, MS 3512, MIB Washington, DC 20240 (202) 219-1127 / Fax: (202) 219-9583

# Eisenhower National Clearinghouse (ENC) Capital Collection

Located at The George Washington University in Washington, DC, this site serves as a minirepository for ENC's K-12 mathematics and science resources. It is also one of 12 ENC Demonstration Sites throughout the Nation. The Capital Collection includes representative materials from the ENC National Collection; highlights are K-12 mathematics and science education materials produced by Federal agencies and commercial publishers. The Capital Collection and Demonstration Site is open year-round at hours convenient to teachers. Educators and others may preview curriculum materials included in the Collection and learn how to integrate technology into their classroom activities. Several computer workstations are available for educators to search the ENC Resource Finder for additional resources, including those found via the Internet. Upon request, Capital Collection staff will travel to schools in the Washington, DC, metropolitan area to demonstrate ENC Online and other resources.

The George Washington University Gelman Library—Room B06 2130 H Street NW Washington, DC 20052 (202) 994-4519 / Fax: (202) 994-4520 E-mail: enc@gwis2.circ.gwu.edu

# Mid-Atlantic Eisenhower Consortium for Mathematics and Science Education

The Eisenhower Regional Consortium provides information and technical assistance to help States and school districts improve mathematics and science education.

Keith Kershner, Director
Mid-Atlantic Eisenhower Consortium for
Mathematics and Science Education
444 North Third Street
Philadelphia, PA 19123-4107
(215) 574-9300 / Fax: (215) 574-0133
E-mail: kershner@rbs.org
WWW: http://www.rbs.org/eisenhower/

## Mid-Atlantic Laboratory for Student Success (LSS)

LSS identifies effective teaching techniques and school improvement efforts within the region and shares this information with State and local educators.



**EST COPY AVAILABLE** 

Dr. Margaret Wang, Executive Director Laboratory for Student Success Temple University Center for Research in Human Development and Education 933 Ritter Annex 1301 Cecil B. Moore Avenue Philadelphia, PA 19122-6091 (215) 204-3030 or (800) 892-5550 Fax: (215) 204-5130 WWW: http://www.temple.edu/ departments/LSS

## Northeast Regional Technology in Education Consortium (NetTech)

ED established the Regional Technology in Education Consortia (R\*TEC) program in the fall of 1995 to help States, districts, schools, adult literacy centers, and other educational institutions use advanced technology to support improved teaching and student achievement. R\*TEC's role in educational technology is unique in two ways: the emphasis is regional and the primary goal is to ensure that technology is used effectively to support school reform. Program strategies include professional development, technical assistance, and information dissemination.

Bonnie Brownstein and Michael Ribaudo, Co-Directors NetTech City University of New York 555 West 57th Street New York, NY 10019 (212) 541-0972 / Fax: (212) 541-0357 E-mail: blbbh@cunyvm.cuny.edu WWW: http://www.nettech.org/

Kathy Fuller, R\*TEC Project Officer U.S. Department of Education Office of Educational Research and Improvement ORAD/SLSD, Room 506c 555 New Jersey Avenue NW Washington, DC 20208-5644 (202) 219-2281 E-mail: Kathy\_Fuller@ed.gov

## ► Department of the Interior (DOI)

## Earth Science Information Center, Washington, DC

The center offers information and sales service for U.S. Geological Survey map products and Earth science publications.

Washington, DC, Earth Science Information Center U.S. Department of the Interior 1849 C Street NW, Room 2650 Washington, DC 20240 (202) 208-4047

### Ft. Dupont Park

The Model Elementary Science Program is a cooperative venture between the District of Columbia Public Schools and the National Park Service. Fifth grade students visit the park three times during the school year to take part in hands-on activities in woodland and meadow ecosystems and indoors in the Nature Discovery room. The program provides inservice workshops to approximately 300 teachers.

Katrina Roberts, Site Manager Ft. Dupont Park 1900 Anacostia Drive SE Washington, DC 20020 (202) 426-7723 / Fax: (202) 426-0698

### **Kenilworth Aquatic Gardens**

Birds and Their Habitat introduces wetland birds. The program discusses when and why birds can be found in this particular habitat and identifies several kinds of birds by color and sound.

Other programs include the following:

- Ecology of a Pond features a detailed survey of freshwater pond environments. Special attention is paid to the life history of ponds, the characteristics of their various zones, and specialized plant and animal life. Coverage includes the food chain, spring and fall overturn, plant successions, invertebrates, and vertebrates.
- ► Frogs and Toads is an introductory survey for the beginning student. The program presents interesting facts about morphology, behavior, reproduction, growth, and development.
- Insects begins with a viewing of fantastic close-up photography of insects, followed by an outdoor trek to view aquatic insects.
- ▶ Introduction to Wetlands introduces the gardens as a wetland. Students discuss characteristics of a wetland and learn of other wetlands in the country. Groups will view a healthy and an unhealthy marsh in order to compare, contrast, and discuss.
- Snakes—More Fascinating Than Fearful includes learning about the snake's life habits, ecology, hatching, shedding, and care. The four poisonous snakes of the United States and Canada are identified; a live specimen may be available for viewing. Discussion is also centered around the myths about snakes and the importance of snakes to people and their environment.
- ▶ Water Plants is a program featuring plants associated with freshwater and how they differ from terrestrial plants. The program will highlight the spectacular inventory of plants at Kenilworth Aquatic Gardens.

▶ Water Pollution and Wildlife is an interactive program featuring a hands-on game called "Who Dirtied the Water?" This program helps children and adults see first hand how water is fouled and the effect it has on the environment.

Cynthia Salter-Stith, Site Manager Kenilworth Aquatic Gardens 1900 Anacostia Drive SE Washington, DC 20020 (202) 426-6905 or 7109

### National Capitol Parks, East

In Animal Life on the Farm, children are introduced to farm animals, their sounds, the benefits derived from them, and the care provided to them for their survival. Teacher workshops include pre- and post-activities for the classroom.

Ann Vonnegut-Frieling, Park Ranger National Capitol Parks, East 1900 Anacostia Drive SE Washington, DC 20020 (202) 619-5185

#### **Rock Creek Nature Center**

Creek Life Walk explores different sections of Rock Creek. The group searches for a variety of plant and animal life found in the park.

Other programs include the following:

- ► Exploring the Night Sky uses telescopes provided by the National Capital Astronomers to view the planets, moon, and other space objects. Special topics such as comets, meteor showers, and/or special astronomical events are covered, depending on the time of year.
- ► Tales for Tots teaches preschoolers and kindergartners about a variety of animal adaptations and survival techniques used by animals in their everyday lives
- ▶ Wildlife Education Kits focus on three park animals: the white-tailed deer, eastern box turtle, and great-horned owl. The kits are available for teachers to use at their school. The kits contain lesson plans and activities for each animal.

Julia Washburn, Interpretive Supervisor Rock Creek Nature Center 5200 Glover Road NW Washington, DC 20015 (202) 426-6828 / Fax: (202) 426-0964

### **Project WILD**

Project WILD offers teacher training and educational materials. Teacher guides, free to teachers who attend the training session, contain more than 80 supplementary, interdisciplinary activities for grades K-12.



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Jim Butler, Project WILD Coordinator Environmental Regulation Administration 2100 Martin Luther King Jr. Avenue SE Washington, DC 20020 (202) 404-1145, ext. 3054 Fax: (202) 404-1150

## ► Department of Labor (DOL)

### Job Training Partnership Act (ITPA) Liaison

The JTPA Liaison can provide information about the Job Training Partnership Act State and local programs for economically disadvantaged adults and youth.

Daryl Hardy, Deputy Director Training and Development Department of Employment Services 500 C Street NW, Suite 600 Washington, DC 20001 (202) 724-7185 / Fax: (202) 639-1357

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## Federal Aviation Administration (FAA) Aviation Education

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Jim Szakary, AEA-61, FAA Aviation Education Representative JFK International Airport Federal Building, #111 Jamaica, NY 11430 (718) 553-3364 / Fax: (718) 553-1455

Terry White Aviation Education Program (AHR-15) Federal Aviation Administration Aviation Education Program 400 Seventh Street SW, Plaza 100 Washington, DC 20590 (202) 366-7018 / Fax: (202) 366-3786

Phillip S. Woodruff, Aviation Education Team Leader Aviation Education Program (AHR-15) Federal Aviation Administration 400 Seventh Street SW, Plaza 100 Washington, DC 20590 (202) 366-7018 / Fax: (202) 366-3786

## ► Environmental Protection Agency (EPA)

### **EPA** Regional Office

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Bonnie Smith and Nan Ides, Environmental Education Coordinators Environmental Protection Agency 841 Chestnut Street (3EA20) Philadelphia, PA 19107 (215) 566-5546 / Fax: (215) 566-5102

## The President's Environmental Youth Awards (PEYA) Program

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awarded to each participant by EPA regional offices. National individual project winners, or one representative from a National award-winning group project, along with one sponsor, are honored at EPA headquarters in Washington, DC. Interested K–12 individuals or groups may obtain application materials and contest rules by contacting the EPA Regional Office that serves their State. PEYA has been an ongoing project since it was created by the White House Office of Education and the EPA in 1971.

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#### **NASA Educator Resource Center**

The center has NASA-related educational materials in various formats, including laser discs, CD-ROMs, videotapes, slides, audiotapes, publications, and teacher guides. Educators may preview or copy NASA materials upon request.

Educator Resource Laboratory NASA Goddard Space Flight Center Mail Code 130.3 Greenbelt, MD 20771-0001 (301) 286-8570

### **NASA Field Centers**

Each field center has an educational programs officer who is responsible for precollege education programs. In addition to administering National programs, the center offers programs and services to meet regional and local needs.

Education Programs NASA Goddard Space Flight Center Mail Code 130 Greenbelt, MD 20771-0001 (301) 286-7206

### NASA Regional Educator Resource Center (RERC)

To offer more educators the opportunity to visit the Educator Resource Center Network (ERCN), NASA forms partnerships with planetariums, universities, museums, and other nonprofit organizations to serve as RERCs. Teachers may preview or copy NASA materials upon request.



University of the District of Columbia NASA Regional Educator Resource Center 4200 Connecticut Avenue NW, MS 4201 Washington, DC 20008 (202) 274-6287/6288/6285

National Air and Space Museum Smithsonian Institution Education Resource Center, MRC-305 Washington, DC 20560 (202) 786-2109

### **Space Grant Consortium**

The Space Grant Consortium in each State consists of colleges, universities, industry, and other organizations that have an interest in aeronautics and space education. Each consortium receives NASA funds for use in implementing a balanced program of research, education, and public service.

District of Columbia Space Grant Consortium Space Policy Institute 714 Gelman Library 2130 H Street NW George Washington University Washington, DC 20052 (202) 995-2615

### **▶Smithsonian Institution**

### National Air and Space Museum

The museum's Educational Services
Department provides various services to science educators, including collections-based curriculum materials and workshops to assist teachers in utilizing the many museum resources. NASM's home page contains online galleries, educational materials, and information about education programs.

National Air and Space Museum Educational Services Department, MRC 305 Washington, DC 20560 (202) 786-2524 / Fax: (202) 633-8174

## National Science Resources Center

The center maintains a comprehensive collection of effective science teaching resource materials. It holds more than 5,000 volumes, including materials developed by National curriculum projects, school systems, commercial publishers, and science museums. Educators interested in visiting the collection may call to make arrangements.

Douglas Lapp, Executive Director National Science Resources Center, MRC 403 Smithsonian Institution Washington, DC 20560 (202) 357-4892 / Fax: (202) 786-2028

### National Zoological Park

At the precollege level, the Zoo's education department offers programs, self-guiding materials, learning lab sessions, and teacher workshops. *The National Zoo News* is a yearly newspaper that contains useful teacher information.

Office of Education and Volunteer Services National Zoological Park Smithsonian Institution Washington, DC 20008 (202) 673-4955

### **Maryland**

## ► Department of Agriculture (USDA)

### 4-H State Leader

The State 4-H Youth Development Programs are administered by the Cooperative Extension Service at land-grant universities. State 4-H leaders coordinate outreach services and training to all county offices.

Edith C. Williams, Associate Director 4-H and HE 8020 Greenmead Drive University of Maryland College Park, MD 20740 (301) 422-4248 / Fax: (301) 422-7914 E-mail: ew17@umail.umd.edu

### Ag in the Classroom State Leader

This program promotes increased understanding of agriculture and possible careers in the agricultural sciences. With National leadership provided by USDA, each State manages its own programs, with assistance from agribusiness, educational institutions, and government.

Steven A. Connelly Maryland Agricultural Education Foundation, Inc. 2101 East Fort Avenue, Suite 124 Baltimore, MD 21230 (410) 752-0671 / Fax: (410) 783-0857

### Youth Enrichment Program

Sponsored by the Agricultural Research Service, this program provides first-hand science experience for more than 100 high school students interested in attending college and pursuing science careers. Rosanna Taylor, Manager U.S. Department of Agriculture Office of the Administrator Special Programs, Room 3552-S 1400 Independence Avenue SW Washington, DC 20250-0301 (202) 720-3511

## **▶** Department of Commerce (DOC)

### Chesapeake Bay National Estuarine Research Reserve

The reserve offers both in-school and onsite education programs. Reservations are required.

Kathleen Buppert, Education Coordinator Chesapeake Bay National Estuarine Research Reserve

Division of Natural Resources Tawes State Office Building, E-2 580 Taylor Avenue Annapolis, MD 21401 (410) 974-8474 / Fax: (410) 974-2833

## National Sea Grant College Program, Operation Pathfinder

The program consists of two-week summer courses that present an introduction to oceanographic and coastal processes. Courses are available in six regions and are designed to enhance skills in science teaching.

Bill Hall Delaware Sea Grant 700 Pilottown Road Lewes, DE 19958 (302) 645-4253 / Fax: (302) 645-4007

## National Institute of Standards and Technology

The institute's Student Programs provide employment for high school, undergraduate, and graduate level students who are pursuing courses in physical sciences, engineering, computer science, or mathematics.

Kimberly J. Goode, Student Coordinator National Institute of Standards and Technology Office of Personnel and Civil Rights Administration Building, Room A123 Gaithersburg, MD 20899 (301) 975-3026



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## ► Department of Defense (DoD)

### National Security Agency (NSA)

The NSA sponsors a Mathematics Speakers Bureau that offers a variety of fun and fascinating mathematics and science talks to elementary, middle, or high school students by members of the NSA mathematics and science community. The objective is to increase student interest in mathematics and science and present instruction that models the recommendations of the National Council of Teachers of Mathematics Standards. A catalog of topics is available.

National Security Agency Undergraduate Training Program Attention: M3222 Fort Meade, MD 20755-6000 (410) 859-4590 / Fax: (800) 962-9398

### Naval Air Station, Patuxent River

The air station participates in the Navy Community Service Program through formation of partnerships with schools and other youth organizations in the area.

NAS Patuxent River MD Commander Naval Air Station Code NAS ADMIN Patuxent River, MD 20670-5304 (301) 826-1016

### Naval Air Test and Evaluation Museum

The museum depicts the history of testing and evaluating U.S. naval aircraft. Exhibits include actual aircraft, a cockpit trainer, and hands-on displays. Admission is free and tours are available upon request.

Naval Air Test and Evaluation Museum Naval Air Warfare Center PO Box 407 Patuxent River, MD 20670-5304 (301) 863-7418

## Science and Engineering Apprentice Program

This program, supported by DoD and administered by The George Washington University, is designed to provide research experience for high school students attending school near the participating research facility. Each student works with a senior scientist or engineer who acts as a mentor for eight weeks during the summer. The following are participating organizations in the State of Maryland:

Dr. David Lenz Army Medical Research Institute of Chemical Defense (MRICD) Aberdeen Proving Ground, MD 21010-5425 (410) 671-2455

Dr. Carol Linden Army Medical Research Institute of Infectious Disease (MRIID) Ft. Detrick, MD 21702-5011 (301) 619-2767

(410) 278-6807

George Klem Army Research Laboratory (ARL-APG) Aberdeen Proving Ground, MD 21005-5066

Steve Kistner
Center, for Health Promotion and Preventive
Medicine (CHPPM)
MCHB-ZA, Building E-2100
Aberdeen Proving Ground, MD 21010-5422
(410) 671-2307

Phyllis Scales Edgewood Research, Development and Engineering Center (ERDEC) Aberdeen Proving Ground, MD 21010-5423 (410) 671-5722

Bobbie Everett Naval Air Warfare Center Aircraft Division (NAWC-AD) Patuxent River, MD 20670-5304 (301) 342-3734, ext. 107

Sylvia Rhodes Naval Surface Warfare Center Indian Head Division (NSWC-IH) 101 Strauss Avenue, Code 061A Indian Head, MD 20640-5035 (301) 743-6525

The following participating organizations are also located in Maryland.

Armed Forces Radiobiology Research Institute (AFRRI), Bethesda; Army Research Laboratory (ARL-A), Adelphi; Naval Air Warfare Center Aircraft Division (NAWC-AD), Patuxent River; Naval Dental Research Institute, Detachment, Bethesda; Naval Medical Research Institute, Bethesda; Naval Surface Warfare Centers in Carderock (NSWC-C); Uniformed Services University of the Health Sciences, Bethesda; United States Naval Academy (USNA), Annapolis; Walter Reed Army Institute of Research (WRAIR) in Gaithersburg, Rockville, and Wheaton.

For more information on the above programs, contact:

Marylin Krupsaw GWU/SEAS Science and Engineering Apprentice Program 707 22nd Street NW Washington, DC 20052 (202) 994-2234

## U.S. Naval Academy, Annapolis (USNA)

USNA participates in the Navy Community Service Program through formation of partnerships with schools and other youth organizations in the area.

USNA, Annapolis MD Superintendent U.S. Naval Academy 121 Blake Road Human Programs Office, Stop 1J Annapolis, MD 21402-5000 (410) 293-2293

### ▶ Department of Education (ED)

### **Eisenhower State Coordinators**

Eisenhower State Coordinators administer the Eisenhower Professional Development Program State Formula grants. The program focuses on sustained and intensive high-quality professional development through inservice programs.

Donna Crabbe
Eisenhower Professional Development
Program
Maryland Department of Education
200 West Baltimore Street
Baltimore, MD 21201-2595
(410) 767-0355 / Fax: (410) 333-2379

## Eisenhower State Coordinators for Higher Education

Eisenhower State Coordinators oversee the Eisenhower Professional Development State Formula Grants for the State Agency for Higher Education (SAHE). The program focuses on teacher enhancement through both inservice and preservice programs.

Linarda Tyler, Director of Grants and Contracts Eisenhower Professional Development Program Maryland Higher Education Commission 16 Francis Street Annapolis, MD 21401-1781 (410) 974-2467 / Fax: (410) 974-3513



### Mid-Atlantic Eisenhower Consortium for Mathematics and Science Education

The Eisenhower Regional Consortium provides information and technical assistance to help States and school districts improve mathematics and science education.

Keith Kershner, Director Mid-Atlantic Eisenhower Consortium for Mathematics and Science Education 444 North Third Street Philadelphia, PA 19123-4107 (215) 574-9300 / Fax: (215) 574-0133 E-mail: kershner@rbs.org WWW: http://www.rbs.org/eisenhower/

### Mid-Atlantic Laboratory for Student Success (LSS)

LSS identifies effective teaching techniques and school improvement efforts within the region and shares this information with State and local educators.

Dr. Margaret Wang, Executive Director Laboratory for Student Success Temple University Center for Research in Human Development and Education 933 Ritter Annex 1301 Cecil B. Moore Avenue Philadelphia, PA 19122-6091 (215) 204-3030 or (800) 892-5550 Fax: (215) 204-5130 WWW: http://www.temple.edu/ departments/LSS

### Northeast Regional Technology in Education Consortium (NetTech)

ED established the Regional Technology in Education Consortia (R\*TEC) program in the fall of 1995 to help States, districts, schools, adult literacy centers, and other educational institutions use advanced technology to support improved teaching and student achievement. R\*TEC's role in educational technology is unique in two ways: the emphasis is regional and the primary goal is to ensure that technology is used effectively to support school reform. Program strategies include professional development, technical assistance, and information dissemination.

Bonnie Brownstein and Michael Ribaudo, Co-Directors NetTech City University of New York 555 West 57th Street New York, NY 10019 (212) 541-0972 / Fax: (212) 541-0357 E-mail: blbbh@cunyvm.cuny.edu WWW: http://www.nettech.org/

Kathy Fuller, R\*TEC Project Officer U.S. Department of Education Office of Educational Research and Improvement ORAD/SLSD, Room 506c 555 New Jersey Avenue NW Washington, DC 20208-5644 (202) 219-2281 E-mail: Kathy Fuller@ed.gov

### **▶** Department of Energy (DOE)

### **Appalachian Regional Commission** (ARC) and Oak Ridge National Laboratory (ORNL)

A summer science, mathematics, and technology Teacher Leadership Institute is available for secondary teachers to participate in research-based programs at ORNL. The institute is provided in a two-week summer residential format patterned after the ORNL/ National Science Foundation (NSF) National Teacher Enhancement Project and Leadership Institute. Participants are selected by the ARC from secondary schools throughout the ARC region. The focus is on hands-on laboratory research applying the tools and methods used in ongoing ORNL projects in research areas (as appropriate for each teacher's teaching assignment), pedagogy, and leadership. The program will feature telecommunications instruction at the ORNL Regional Science Center and telecommunications will be the primary method used for academic year follow-up and continued interactions with the teachers. Participants in the Teacher Leadership Institute will be hosted by several ORNL research divisions based on each teacher's background and interests. A program coordinator with experience in teacher preparation/higher education delivers instruction in pedagogy and educational leadership.

ARC and ORNL also collaborate on a summer science, mathematics, and technology Summer Science Honors Academy for ARC students to participate in research-based programs at ORNL. Student participants (seniors or graduating seniors) will be selected by the ARC from secondary schools throughout the ARC region. Students will be teamed with research mentors to participate in hands-on laboratory research applying the tools and methods used in ongoing ORNL projects. Students will also receive telecommunications instruction at the ORNL Regional Science Center.

Terry L. Lashley, Education Partnerships Team Leader Oak Ridge National Laboratory Office of University and Science Education PO Box 2008 5500A, MS 6366 Oak Ridge, TN 37831-6366 (423) 574-0689 / Fax: (423) 241-6726 E-mail: TL7@ornl.gov

### ▶ Department of the Interior (DOI)

### **Assateague Island National Seashore**

Onsite environmental activities such as beachcombing and marsh studies are available to students at all grade levels at the seashore. Previsit curriculum materials and guided tours are also available.

Other programs include the following:

- **▶** Dune What Comes Naturally Puppet Show introduces students to the dynamic nature of the barrier island ecosystem through the characters of Lorna Dune and her friends. Ecological content is presented in a humorous, interactive way.
- ► Grade 1 Aquarium/Beachcombers Talk is a curriculum-based program that introduces material associated with food chains and homes. A class spends half an hour in a talk at the aquariums and half an hour talk in the Beachcomber Room. The talks are led by naturalists. Students also participate in a pantomime story about the food chain.
- ► Salt Marsh Study is designed to introduce the importance of the salt marsh ecosystem, complex inter-connections, and general ecological principles. Students use seine nets in the bay for an up-close look at this productive area.

Rachelle Daigneault, Education Coordinator Assateague Island National Seashore 7206 National Seashore Lane, Route 611 Berlin, MD 21811 (410) 641-1443

### **Blackwater National Wildlife** Refuge

In addition to guided walks and bus tours, the refuge also offers summer environmental education programs.

Outdoor Recreation Planner Blackwater National Wildlife Refuge 2145 Key Wallace Drive Cambridge, MD 21613 (410) 228-2677 / Fax: (410) 228-3261



## **Bureau of Land Management Eastern States Office**

This office provides information about educational programs, materials, and local land-management issues.

Education Coordinator Bureau of Land Management 7450 Boston Boulevard Springfield, VA 22153 (703) 440-1713

#### Catoctin Mountain Park

Deer Discovery is an interactive computer program; half the program features deer ecology and the other half has students select elements to design their own forest. Concepts introduced include deer management, predator/prey relationships, competitor species, and habitats. The program, which is specific to Catoctin Mountain Park, also features the ability to print a report of the Design-a-Forest activity.

Roger G. Steintl, Chief Ranger Catoctin Mountain Park 6602 Foxville Road Thurmont, MD 21788 (301) 663-9330 / Fax: (301) 271-2764

### **Chesapeake Bay Field Office**

The Watershed Education Kit includes a poster of the Chesapeake Bay drainage, a student activity guide, and student work maps. Through a variety of activities that incorporate math, science, social studies, and language arts, students are introduced to many issues within the watershed.

Rich Mason, Education Biologist Chesapeake Bay Field Office 177 Admiral Cochrane Drive Annapolis, MD 21401 (410) 573-4584 / Fax: (410) 224-2781

### Minerals Management Service (MMS) Regional Office

The MMS Regional Office provides a range of educational services. Teacher inservice programs and classroom visitations may include supplemental materials. Availability may be limited, but arrangements may be made for duplication of some materials at minimal cost.

Offshore Minerals Management Technical Communications Service Minerals Management Service 381 Eldon Street, MS 4530 Herndon, VA 20170-4817 (703) 787-1080 / Fax: (703) 787-1186 Office of Communications and Governmental Affairs

Education Coordinator Minerals Management Service 1849 C Street NW, LMS4230 Washington, DC 20240-0001 (202) 208-3985 / Fax: (202) 208-3968

### **Project WILD**

Project WILD offers teacher training and educational materials. Teacher guides, free to teachers who attend the training session, contain more than 80 supplementary, interdisciplinary activities for grades K-12.

Earl Hodil, Project WILD Coordinator Fish, Heritage, and Wildlife Administration Tawes State Office Building 580 Taylor Avenue Annapolis, MD 21401 (410) 974-3195 / Fax: (410) 974-3587

### ► Department of Transportation (DOT)

## Federal Aviation Administration (FAA) Aviation Education

The FAA Aviation Education Representative coordinates aviation education services, including materials and programs for the FAA in the States assigned to the region.

Programs include:

- ▶ The Aviation Career Education (ACE)
  Academy is a one-week summer aviation education program for high school students sponsored by the FAA along with a host educational institution. The program provides students with diverse experiences in aviation career exploration. The focus is on aviation career clusters identified by FAA, with an emphasis on opportunities for women and minorities. A goal is to have one program in each State and U.S. Territory. The FAA will conduct regional leadership workshops and provide funds based on the availability of resources.
- ▶ Aviation Education Workshops for Teachers provide teachers with information on FAA aviation programs and materials and prepare them to teach aviation in the classroom. Annual workshops are conducted at colleges and universities across the Nation. The FAA provides information, materials, and speakers for the program.
- National Congress on Aviation and Space Education is sponsored annually by the FAA in partnership with the National Aeronautics and Space Administration and the Civil Air Patrol. The meeting includes teacher workshops and crosstalk

sessions to exchange ideas on promoting aerospace education.

Jim Szakary, AEA-61 FAA Aviation Education Representative JFK International Airport Federal Building, #111 Jamaica, NY 11430 (718) 553-3364 / Fax: (718) 553-1455

### FAA Aviation Education Resource Centers

Located at colleges, museums, and State aviation authority offices, these centers function as information distribution centers for Federal Aviation Administration education materials and resources. The Resource Centers maintain and provide quantities of printed materials, videotapes, and computer educational software. Center personnel can also provide general information, conduct workshops, and make aviation-related presentations.

Abraham D. Spinak, Director University of Maryland Eastern Shore Airway Science Program Princess Anne, MD 21853-1299 (401) 651-6489

## ► Environmental Protection Agency (EPA)

### **EPA** Regional Office

This office takes part in a variety of environmental education programs for both teachers and students. Programs range from teacher workshops and student contests to in-school presentations. Information on environmental issues is also available through the Public Information Center located at the office.

Bonnie Smith and Nan Ides Environmental Education Coordinators Environmental Protection Agency 841 Chestnut Street (3EA20) Philadelphia, PA 19107 (215) 566-5546 / Fax: (215) 566-5102

## The President's Environmental Youth Awards (PEYA) Program

Young people from each State are invited to participate in PEYA, a nationwide program designed to encourage individuals, school classes, summer camps, public interest groups, and youth organizations to promote environmental awareness and community involvement. The two components of the program are the regional certificate program and the National awards competition. Regional certificates, signed by the President, are awarded to each participant by EPA regional offices. National individual project winners,



or one representative from a National awardwinning group project, along with one sponsor, are honored at EPA headquarters in Washington, DC. Interested K-12 individuals or groups may obtain application materials and contest rules by contacting the EPA Regional Office that serves their State. PEYA has been an ongoing project since it was created by the White House Office of Education and the EPA in 1971.

EPA Region 3 81 Chestnut Street (3EA20) Philadelphia, PA 19107 (215) 566-5543 / Fax: (215) 566-5102

### **▶National Aeronautics and Space Administration** (NASA)

### **NASA Educator Resource Center**

The center has NASA-related educational materials in various formats, including laser discs, CD-ROMs, videotapes, slides, audiotapes, publications, and teacher guides. Educators may preview or copy NASA materials upon request.

Educator Resource Laboratory NASA Goddard Space Flight Center Mail Code 130.3 Greenbelt, MD 20771-0001 (301) 286-8570

### **NASA** Field Centers

Each field center has an educational programs officer who is responsible for precollege education programs. In addition to administering National programs, the center offers programs and services to meet regional and local needs.

**Education Programs** NASA Goddard Space Flight Center Mail Code 130 Greenbelt, MD 20771-0001 (301) 286-7206

### **Space Grant Consortium**

The Space Grant Consortium in each State consists of colleges, universities, industry, and other organizations that have an interest in aeronautics and space education. Each consortium receives NASA funds for use in implementing a balanced program of research, education, and public service.

Maryland Space Grant Consortium Bloomberg Center for Physics and Astronomy 3400 North Charles Street Baltimore, MD 21218-2695 (410) 516-7350

### **▶**Smithsonian Institution

### **Smithsonian Environmental** Research Center

The center occupies 2,600 acres of the Rhode River tidal river system and is part of a network of sites conducting ecological research relevant to their geographic regions. A broad range of educational activities include teacher-led field trips, self-guided nature trails, guided tours, and workshops. Research opportunities are available for student interns and professionals.

Smithsonian Environmental Research Center PO Box 28 Edgewater, MD 21037 (301) 261-4190 / Fax: (301) 261-7954

### **New Jersey**

### **▶** Department of Agriculture (USDA)

#### 4-H State Leader

The State 4-H Youth Development Programs are administered by the Cooperative Extension Service at land-grant universities. State 4-H leaders coordinate outreach services and training to all county offices.

Dr. Richard W. Clark, State 4-H Leader Cook College, Waller Hall PO Box 231 New Brunswick, NJ 08903 (908) 932-9704 / Fax: (908) 932-7541

E-mail: clark@aesop.rutgers.edu

### Ag in the Classroom State Leader

This program promotes increased understanding of agriculture and possible careers in the agricultural sciences. With National leadership provided by USDA, each State manages its own programs, with assistance from agribusiness, educational institutions, and government.

Ioni Elliot New Jersey Department of Agriculture CN 330 Trenton, NI 08625 (609) 292-8897 or 633-7463 Fax: (609) 292-3978

### Youth Enrichment Program

Sponsored by the Agricultural Research Service, this program provides first-hand science experience for more than 100 high school students interested in attending college and pursuing science careers.

Rosanna Taylor, Manager U.S. Department of Agriculture Office of the Administrator Special Programs, Room 3552-S 1400 Independence Avenue SW Washington, DC 20250-0301 (202) 720-3511

### **▶** Department of Commerce (DOC)

### National Sea Grant College Program, Operation Pathfinder

The program consists of two-week summer courses that present an introduction to oceanographic and coastal processes. Courses are available in six regions and are designed to enhance skills in science teaching.

Bill Hall Delaware Sea Grant 700 Pilottown Road Lewes, DE 19958 (302) 645-4253 / Fax: (302) 645-4007

### **▶** Department of Defense (DoD)

### Armament Research, Development, and Engineering

The center offers both student employment and student apprenticeship programs, as well as outreach assistance to nearby schools. Special tours of the arsenal museum are also available.

U.S. Army, ARDEC Public Affairs Office Picatinny Arsenal, NJ 07806-5000 (201) 724-6365

### Science and Engineering **Apprentice Program**

This program, supported by DoD and administered by The George Washington University, is designed to provide research experience for high school students attending school near the university. Each student works with a senior scientist or engineer who acts as a mentor for eight weeks during the summer.



Marilyn Guest
U.S. Army CECOM
Research, Development and Engineering
Center
Attn: AMSEL-RD-ADO-MS
Ft. Monmouth, NJ 07703-5201
(908) 532-0350

## ► Department of Education (ED)

### Eisenhower State Coordinators

Eisenhower State Coordinators administer the Eisenhower Professional Development Program State Formula grants. The program focuses on sustained and intensive high-quality professional development through inservice programs.

Iris Nagler
Eisenhower Professional Development
Program
Bureau of Curriculum and Technology
New Jersey Department of Education
CN 500
Trenton, NJ 08625-0500
(609) 984-6031 / Fax: (609) 292-7276

## Eisenhower State Coordinators for Higher Education

Eisenhower State Coordinators oversee the Eisenhower Professional Development State Formula Grants for the State Agency for Higher Education (SAHE). The program focuses on teacher enhancement through both inservice and preservice programs.

Maria Rosado, Assistant Director Eisenhower Professional Development Program New Jersey Department of Education Division of Academic Programs and Standards 240 West State Street, CN 500 Trenton, NJ 08625 (609) 633-8014 or 984-6031 Fax: (609) 633-9825

## Mid-Atlantic Eisenhower Consortium for Mathematics and Science Education

The Eisenhower Regional Consortium provides information and technical assistance to help States and school districts improve mathematics and science education.

Keith Kershner, Director
Mid-Atlantic Eisenhower Consortium for
Mathematics and Science Education
444 North Third Street
Philadelphia, PA 19123-4107
(215) 574-9300 / Fax: (215) 574-0133
E-mail: kershner@rbs.org
WWW: http://www.rbs.org/eisenhower/

## Mid-Atlantic Laboratory for Student Success (LSS)

LSS identifies effective teaching techniques and school improvement efforts within the region and shares this information with State and local educators.

Dr. Margaret Wang, Executive Director Laboratory for Student Success Temple University Center for Research in Human Development and Education 933 Ritter Annex 1301 Cecil B. Moore Avenue Philadelphia, PA 19122-6091 (215) 204-3030 or (800) 892-5550 Fax: (215) 204-5130 WWW: http://www.temple.edu/ departments/LSS

## Northeast Regional Technology in Education Consortium (NetTech)

ED established the Regional Technology in Education Consortia (R\*TEC) program in the fall of 1995 to help States, districts, schools, adult literacy centers, and other educational institutions use advanced technology to support improved teaching and student achievement. R\*TEC's role in educational technology is unique in two ways: the emphasis is regional and the primary goal is to ensure that technology is used effectively to support school reform. Program strategies include professional development, technical assistance, and information dissemination.

Bonnie Brownstein and Michael Ribaudo, Co-Directors NetTech City University of New York 555 West 57th Street New York, NY 10019 (212) 541-0972 / Fax: (212) 541-0357 E-mail: blbbh@cunyvm.cuny.edu WWW: http://www.nettech.org/

Kathy Fuller, R\*TEC Project Officer U.S. Department of Education Office of Educational Research and Improvement ORAD/SLSD, Room 506c 555 New Jersey Avenue NW Washington, DC 20208-5644 (202) 219-2281 E-mail: Kathy\_Fuller@ed.gov

## ► Department of Energy (DOE)

## Princeton Plasma Physics Laboratory

The laboratory welcomes field trips and provides guided tours of its facility. It also sponsors summer teacher enhancement institutes

for New Jersey and Pennsylvania teachers. Research opportunities are available for undergraduates across the United States. The Science on Saturdays lecture series, a nineweek program (January–March) geared toward high school students, is open to all.

Diane Carroll, Head Science Education Program Princeton Plasma Physics Laboratory Princeton University James Forrestal Campus PO Box 451, Route 1 Princeton, NJ 08543 (609) 243-2107 / Fax: (609) 243-2112 E-mail: dcarroll@pppl.gov

### ▶ Department of the Interior (DOI)

### **Bureau of Land Management Eastern States Office**

This office provides information about educational programs, materials, and local land-management issues.

Education Coordinator Bureau of Land Management 7450 Boston Boulevard Springfield, VA 22153 (703) 440-1713

#### **Gateway National Recreation Area**

In the Ecology Village Camping Program, students and teachers explore the environment, sleep in tents, prepare meals outdoors, and practice teamwork at an Ecology Village campsite. Classes study science, nature, and history at the shore and in the uplands habitat.

Educational opportunities at Sandy Hook include programs in oceanography, geology, and the marine environment. These programs educate teachers, students, families, and other groups, about the importance of the ocean and its resources.

Maggie Zadorozny, Environmental Education Specialist Gateway National Recreation Area Headquarters Floyd Bennett Field Brooklyn, NY 11234 (718) 338-3606 / Fax: (718) 338-3560

### Minerals Management Service (MMS) Regional Office

The MMS Regional Office provides a range of educational services. Teacher inservice programs and classroom visitations may include supplemental materials. Availability may be limited, but arrangements may be made for duplication of some materials at minimal cost.



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Office of Communications and Governmental Affairs

Education Coordinator Minerals Management Service 1849 C Street NW, LMS4230 Washington, DC 20240-0001 (202) 208-3985 / Fax: (202) 208-3968

Offshore Minerals Management Technical Communications Service Minerals Management Service 381 Eldon Street, MS 4530 Herndon, VA 20170-4817 (703) 787-1080 / Fax: (703) 787-1186

### **Project WILD**

Project WILD offers teacher training and educational materials. Teacher guides, free to teachers who attend the training session, contain more than 80 supplementary, interdisciplinary activities for grades K-12.

Miriam Dunne, Project WILD Coordinator Division of Fish, Game, and Wildlife Request Center, Rural Route 1, Box 389 Oxford, NJ 07863 (908) 637-4125 / Fax: (908) 637-6735

Larry Sarner Aquatic WILD Coordinator Division of Fish, Game and Wildlife PO Box 418 Port Republic, NJ 08241 (609) 748-2031 / Fax: (609) 748-2032

### U.S. Fish and Wildlife Service

Earth Stewards is an innovative environmental education program developed by the U.S. Fish and Wildlife Service, the National Biological Service, and the National Fish and Wildlife Foundation. The program's goal is to educate students at all grade levels about varied natural resource issues in their community via a course curriculum and hands-on stewardship activities.

Angela V. Graziano, Communications Specialist U.S. Fish and Wildlife Service New Jersey Field Office 927 North Main Street, Building D Pleasantville, NJ 08232 (609) 646-9310 / Fax: (609) 646-0352

## ► Department of Labor (DOL)

## Job Training Partnership Act (JTPA) Liaison

The JTPA Liaison can provide information about the Job Training Partnership Act State and local programs for economically disadvantaged adults and youth.

Raymond L. Bramucci, Commissioner State of New Jersey Department of Labor CN110

Trenton, NJ 08625 (609) 292-2323 / Fax: (609) 633-9271

## ► Department of Transportation (DOT)

## Federal Aviation Administration (FAA) Aviation Education

The FAA Aviation Education Representative coordinates aviation education services, including materials and programs for the FAA in the States assigned to the region.

Programs include:

- The Aviation Career Education (ACE)
  Academy is a one-week summer aviation
  education program for high school students sponsored by the FAA along with a
  host educational institution. The program
  provides students with diverse experiences
  in aviation career exploration. The focus
  is on aviation career clusters identified by
  FAA, with an emphasis on opportunities
  for women and minorities. A goal is to
  have one program in each State and U.S.
  Territory. The FAA will conduct regional
  leadership workshops and provide funds
  based on the availability of resources.
- ➤ Aviation Education Workshops for Teachers provide teachers with information on FAA aviation programs and materials and prepare them to teach aviation in the classroom. Annual workshops are conducted at colleges and universities across the Nation. The FAA provides information, materials, and speakers for the program.
- ▶ National Congress on Aviation and Space Education is sponsored annually by the FAA in partnership with the National Aeronautics and Space Administration and the Civil Air Patrol. The meeting includes teacher workshops and crosstalk sessions to exchange ideas on promoting aerospace education.

Jim Szakary, AEA-61 FAA Aviation Education Representative JFK International Airport Federal Building, #111 Jamaica, NY 11430 (718) 553-3364 / Fax: (718) 553-1455

Carleen Genna, ACM-120 FAA Aviation Education Representative Atlantic City International Airport Human Resource Management Division Atlantic City, NJ 08405 (609) 485-6630 / Fax: (609) 485-4391

### FAA Aviation Education Resource Centers

Located at colleges, museums, and State aviation authority offices, these centers function as information distribution centers for Federal Aviation Administration education materials and resources. The Resource Centers maintain and provide quantities of printed materials, videotapes, and computer educational software. Center personnel can also provide general information, conduct workshops, and make aviation-related presentations.

Dr. Martha Pocsi Aviation Education Resource Center Northeast Curriculum Coordination Center Division of Vocational Education Crest Way Aberdeen, NJ 07747 (908) 290-1900

Paul Rigby Aviation Education Resource Center Atlantic Community College 5100 Black Horse Pike Mays Landing, NJ 08330 (609) 343-5113

## ► Environmental Protection Agency (EPA)

#### **EPA Regional Office**

This office takes part in a variety of environmental education programs for both teachers and students. Programs range from teacher workshops and student contests to in-school presentations. Information on environmental issues is also available through the Public Information Center located at the office.

Terry Ippolito, Environmental Education Coordinator Environmental Protection Agency 290 Broadway, 26th Floor New York, NY 10007 (212) 637-3671 / Fax: (212) 637-4445

## The President's Environmental Youth Awards Program

Young people from each State are invited to participate in PEYA, a nationwide program designed to encourage individuals, school classes, summer camps, public interest groups, and youth organizations to promote environmental awareness and community involvement. The two components of the program are the regional certificate program and the National awards competition. Regional certificates, signed by the President, are awarded to each participant by EPA regional offices. National individual project winners, or one representative from a National award-



winning group project, along with one sponsor, are honored at EPA headquarters in Washington, DC. Interested K–12 individuals or groups may obtain application materials and contest rules by contacting the EPA Regional Office that serves their State. PEYA has been an ongoing project since it was created by the White House Office of Education and the EPA in 1971.

EPA Region 2 290 Broadway, 26th Floor New York, NY 10007 (212) 637-3678 / Fax: (212) 637-4445

# ► National Aeronautics and Space Administration (NASA)

#### **NASA Educator Resource Center**

The center has NASA-related educational materials in various formats, including laserdiscs, CD-ROMs, videotapes, slides, audiotapes, publications, and teacher guides. Educators may preview or copy NASA materials upon request.

Educator Resource Laboratory NASA Goddard Space Flight Center Mail Code 130.3 Greenbelt, MD 20771-0001 (301) 286-8570

### **NASA Field Centers**

Each field center has an educational programs officer who is responsible for precollege education programs. In addition to administering National programs, the center offers programs and services to meet regional and local needs.

Education Programs NASA Goddard Space Flight Center Mail Code 130 Greenbelt, MD 20771-0001 (301) 286-7206

### NASA Regional Educator Resource Center (RERC)

To offer more educators the opportunity to visit the Educator Resource Center Network (ERCN), NASA forms partnerships with planetariums, universities, museums, and other nonprofit organizations to serve as RERCs. Teachers may preview or copy NASA materials upon request.

Georgian Court College NASA Regional Educator Resource Center 900 Lakewood Avenue Lakewood, NJ 08701-2697 (908) 364-2200, ext. 479

### **Space Grant Consortium**

The Space Grant Consortium in each State consists of colleges, universities, industry, and other organizations that have an interest in aeronautics and space education. Each consortium receives NASA funds for use in implementing a balanced program of research, education, and public service.

New Jersey Space Grant Consortium Stevens Institute of Technology Castle Point on the Hudson Hoboken, NJ 07030 (201) 216-8964

## ► National Science Foundation (NSF)

## Statewide Systemic Initiatives Program

New Jersey's Statewide Systemic Initiatives Program strengthens mathematics, science, and technology education in grades K–8 through professional support networks among schools and 14 partner institutions. The establishment of models for K–12 reform is being achieved through partnerships representing a cross section of the State's economically and culturally diverse resources. The program includes a set of new policy initiatives and State commitments.

Rebecca Lubetkin, Deputy Project Director Consortium for Educational Equity 4090 Livingston Campus Rutgers University New Brunswick, NJ 08903 (908) 445-2071 / Fax: (908) 445-0027 E-mail: lubetki@gardalf.rutgers.edu

### Pennsylvania

## ► Department of Agriculture (USDA)

### 4-H State Leader

The State 4-H Youth Development Programs are administered by the Cooperative Extension Service at land-grant universities. State 4-H leaders coordinate outreach services and training to all county offices.

Dr. Edgar Yoder, State 4-H Leader and Department Head 4-H and Youth Development The Pennsylvania State University 323 Agriculture Administration University Park, PA 16802-2601 (814) 865-1688 / Fax: (814) 863-4753 E-mail: ed\_yoder@agcs.cas.psu.edu

### Ag in the Classroom State Leader

This program promotes increased understanding of agriculture and possible careers in the agricultural sciences. With National leadership provided by USDA, each State manages its own programs, with assistance from agribusiness, educational institutions, and government.

Pat Sueck 534 Kennedy Road Arrville, PA 17302 (717) 862-3486

### Youth Enrichment Program

Sponsored by the Agricultural Research Service, this program provides first-hand science experience for more than 100 high school students interested in attending college and pursuing science careers.

Rosanna Taylor, Manager U.S. Department of Agriculture Office of the Administrator Special Programs, Room 3552-S 1400 Independence Avenue SW Washington, DC 20250-0301 (202) 720-3511

### Department of Defense (DoD)

## Science and Engineering Apprentice Program

This program, supported by DoD and administered by The George Washington University, is designed to provide research experience for high school students attending school near the participating research facility. Each student works with a senior scientist or engineer who acts as a mentor for eight weeks during the summer.

Roseann Castonguay Naval Surface Warfare Center Philiadelphia (NSWC-P) EEO, Code 3250.2 Philadelphia, PA 19112-5087 (215) 897-7642



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## ► Department of Education (ED)

### **Eisenhower State Coordinators**

Eisenhower State Coordinators administer the Eisenhower Professional Development Program State Formula grants. The program focuses on sustained and intensive high-quality professional development through inservice programs.

Jacqueline B. Jackson
Eisenhower Mathematics and Science
Program
Division of Federal Programs
Pennsylvania Department of Education
333 Market Street, Seventh Floor
Harrisburg, PA 17126-0333
(717) 787-7117 / Fax: (717) 783-6900

### **Eisenhower State Coordinators** for Higher Education

Eisenhower State Coordinators oversee the Eisenhower Professional Development State Formula Grants for the State Agency for Higher Education (SAHE). The program focuses on teacher enhancement through both inservice and preservice programs.

Linda J. Benedetto
Eisenhower Professional Development
Program
Pennsylvania Department of Education
Bureau of Postsecondary Services
333 Market Street, 12th Floor
Harrisburg, PA 17126-0333
(717) 772-3623 / Fax: (717) 783-0583

## Mid-Atlantic Eisenhower Consortium for Mathematics and Science Education

The Eisenhower Regional Consortium provides information and technical assistance to help States and school districts improve mathematics and science education.

Keith Kershner, Director Mid-Atlantic Eisenhower Consortium for Mathematics and Science Education 444 North Third Street Philadelphia, PA 19123-4107 (215) 574-9300 / Fax: (215) 574-0133 E-mail: kershner@rbs.org WWW: http://www.rbs.org/eisenhower/

### Mid-Atlantic Laboratory for Student Success (LSS)

LSS identifies effective teaching techniques and school improvement efforts within the region and shares this information with State and local educators.

Dr. Margaret Wang, Executive Director Laboratory for Student Success Temple University Center for Research in Human Development and Education 933 Ritter Annex 1301 Cecil B. Moore Avenue Philadelphia, PA 19122-6091 (215) 204-3030 or (800) 892-5550 Fax: (215) 204-5130 WWW: http://www.temple.edu/ departments/LSS

## Northeast Regional Technology in Education Consortium (NetTech)

ED established the Regional Technology in Education Consortia (R\*TEC) program in the fall of 1995 to help States, districts, schools, adult literacy centers, and other educational institutions use advanced technology to support improved teaching and student achievement. R\*TEC's role in educational technology is unique in two ways: the emphasis is regional and the primary goal is to ensure that technology is used effectively to support school reform. Program strategies include professional development, technical assistance, and information dissemination.

Bonnie Brownstein and Michael Ribaudo, Co-Directors NetTech City University of New York 555 West 57th Street New York, NY 10019 (212) 541-0972 / Fax: (212) 541-0357 E-mail: blbbh@cunyvm.cuny.edu WWW: http://www.nettech.org/

Kathy Fuller, R\*TEC Project Officer U.S. Department of Education Office of Educational Research and Improvement ORAD/SLSD, Room 506c 555 New Jersey Avenue NW Washington, DC 20208-5644 (202) 219-2281 E-mail: Kathy\_Fuller@ed.gov

## ► Department of Energy (DOE)

### Appalachian Regional Commission (ARC) and Oak Ridge National Laboratory (ORNL)

A summer science, mathematics, and technology Teacher Leadership Institute is available for secondary teachers to participate in research-based programs at ORNL. The institute is provided in a two-week summer residential format patterned after the ORNL/National Science Foundation (NSF)

National Teacher Enhancement Project and Leadership Institute. Participants are selected by the ARC from secondary schools throughout the ARC region. The focus is on handson laboratory research applying the tools and methods used in ongoing ORNL projects in research areas (as appropriate for each teacher's teaching assignment), pedagogy, and leadership. The program will feature telecommunications instruction at the ORNL Regional Science Center and telecommunications will be the primary method used for academic year follow-up and continued interactions with the teachers. Participants in the Teacher Leadership Institute will be hosted by several ORNL research divisions based on each teacher's background and interests. A program coordinator with experience in teacher preparation/higher education delivers instruction in pedagogy and educational leadership.

ARC and ORNL also collaborate on a summer science, mathematics, and technology Summer Science Honors Academy for ARC students to participate in research-based programs at ORNL. Student participants (seniors or graduating seniors) will be selected by the ARC from secondary schools throughout the ARC region. Students will be teamed with research mentors to participate in hands-on laboratory research applying the tools and methods used in ongoing ORNL projects. Students will also receive telecommunications instruction at the ORNL Regional Science Center.

Terry L. Lashley, Education Partnerships Team Leader Oak Ridge National Laboratory Office of University and Science Education PO Box 2008 5500A, MS 6366 Oak Ridge, TN 37831-6366 (423) 574-0689 / Fax: (423) 241-6726 E-mail: TL7@ornl.gov

### Pittsburgh Energy Technology Center

Center programs include a consortium for high school students and technology seminars for teachers. This center also provides a K-6 training seminar with materials.

Fred Brown
Pittsburgh Energy Technology Center
Office of Research and Development
PO Box 10940
Pittsburgh, PA 15236
(412) 892-5942 / Fax: (412) 892-6204



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### ▶ Department of the Interior (DOI)

## Allegheny Portage Railroad National Historic Site

A Clash of Societies is a multimedia program dealing with the breaking of the South Fork Dam, which resulted in the Johnstown Flood of 1889.

Gregory J. Zaborowski, Education Specialist Allegheny Portage Railroad NHS PO Box 189 Cresson, PA 16630 (814) 886-6100 or 886-6153 Fax: (814) 886-6117

### **Bureau of Land Management Eastern States Office**

This office provides information about educational programs, materials, and local land-management issues.

Education Coordinator Bureau of Land Management 7450 Boston Boulevard Springfield, VA 22153 (703) 440-1713

### Erie National Wildlife Refuge

Instruction in the Endangered Species program is designed to increase the awareness of endangered species, the reasons they are endangered, and what is being done to help the recovery. The program has hands-on activities for students.

Other programs include the following:

- ▶ The Wildlife Education Program consists of four separate courses (including Project WILD and Project Learning Tree) offering educators an opportunity to develop awareness, knowledge, and skills related to fish and wetland environments, plant species, animals and their habitats, and photography as a tool for studying the natural world.
- ▶ The Junior Duck Stamp Conservation and Design Program is a dynamic, active arts curriculum to teach wetlands and waterfowl conservation to students in grades K−12. This program is designed to incorporate scientific and wildlife management principles into a visual arts curriculum. This nontraditional pairing of subjects brings new interest to both the sciences and the arts.

Janet A. Marvin, Outdoor Recreation Planner Erie NWR

RD 1, Wood Duck Lane Guys Mills, PA 16327

(814) 789-3585 / Fax: (814) 789-2909 E-mail: r5rw\_enwr@mail.fws.gov

### Delaware Water Gap National Recreation Area

How Clean Is Our Stream? is a water quality monitoring program that uses chemical tests and a biotic index (macroinvertebrate study).

In Walk to the Falls, students are introduced to the natural and cultural history of the ravine and its unique ecosystem.

Randy Turner, Chief Division of Interpretation Delaware Water Gap NRA Bushkill, PA 18324

(717) 588-2432 / Fax: (717) 588-2780

## John Heinz National Wildlife Refuge

In addition to an environmental education materials library, the refuge offers several teacher workshops that promote teacher use of the refuge. Demonstration activities and consultation explain how to use the refuge.

Outdoor Recreation Planner John Heinz National Wildlife Refuge Suite 104, Scott Plaza Two Philadelphia, PA 19113 (215) 521-0662 / Fax: (215) 521-0611

## Upper Delaware Scenic and Recreational River

Programs at the Upper Delaware Scenic and Recreational River include guided walks that focus primarily on the River's ecology. Inschool presentations may be requested.

In the Junior Ranger Program, students learn about the Delaware River both environmentally and culturally. The activities, some of which are hands-on, cover water quality, river safety, the Roebling Aqueduct, Zane Grey, etc.

Ingrid A. Peterec, Education Coordinator Upper Delaware SandRR PO Box C Narrowsburg, NY 12764 (717) 685-4871 / Fax: (717) 685-4874

### Project WILD

Project WILD offers teacher training and educational materials. Teacher guides, free to teachers who attend the training session, contain more than 80 supplementary, interdisciplinary activities for grades K–12.

Theresa Alberici, Project WILD Coordinator Division of Information and Education Pennsylvania Game Commission 2001 Elmerton Avenue Harrisburg, PA 17110-9797 (717) 787-6286 / Fax: (717) 783-2411

Carl Richardson Project WILD Coordinator Pennsylvania Fish and Boat Commission PO Box 67000 Harrisburg, PA 17106-7000 (717) 557-4518 / Fax: (717) 557-4549

### ▶ Department of Labor (DOL)

## Job Training Partnership Act (JTPA) Liaison

The JTPA Liaison can provide information about the Job Training Partnership Act State and local programs for economically disadvantaged adults and youth.

Robert N. Grant, Executive Deputy Secretary Department of Labor and Industry Seventh and Forster Streets, Room 1700 Harrisburg, PA 17120 (717) 787-3157 / Fax: (717) 783-5225

### ► Department of Transportation (DOT)

## Federal Aviation Administration (FAA) Aviation Education

The FAA Aviation Education Representative coordinates aviation education services, including materials and programs for the FAA in the States assigned to the region.

Programs include the following:

- ▶ The Aviation Career Education (ACE)
  Academy is a one-week summer aviation
  education program for high school students sponsored by the FAA along with a
  host educational institution. The program
  provides students with diverse experiences
  in aviation career exploration. The focus
  is on aviation career clusters identified by
  FAA, with an emphasis on opportunities
  for women and minorities. A goal is to
  have one program in each State and U.S.
  Territory. The FAA will conduct regional
  leadership workshops and provide funds
  based on the availability of resources.
- Aviation Education Workshops for Teachers provide teachers with information on FAA aviation programs and materials and prepare them to teach aviation in



the classroom. Annual workshops are conducted at colleges and universities across the Nation. The FAA provides information, materials, and speakers for the program.

▶ National Congress on Aviation and Space Education is sponsored annually by the FAA in partnership with the National Aeronautics and Space Administration and the Civil Air Patrol. The meeting includes teacher workshops and crosstalk sessions to exchange ideas on promoting aerospace education.

Jim Szakary, AEA-61, FAA Aviation Education Representative JFK International Airport Federal Building, #111 Jamaica, NY 11430 (718) 553-3364 / Fax: (718) 553-1455

### FAA Aviation Education Resource Centers

Located at colleges, museums, and State aviation authority offices, these centers function as information distribution centers for Federal Aviation Administration education materials and resources. The Resource Centers maintain and provide quantities of printed materials, videotapes, and computer educational software. Center personnel can also provide general information, conduct workshops, and make aviation-related presentations.

Robert Powell, Assistant Professor Community College of Beaver County Aviation Sciences Center 125 Cessna Drive Beaver Falls, PA 15010-1080 (412) 847-7000

## ► Environmental Protection Agency (EPA)

### **EPA** Regional Office

This office takes part in a variety of environmental education programs for both teachers and students. Programs range from teacher workshops and student contests to in-school presentations. Information on environmental issues is also available through the Public Information Center located at the office.

Bonnie Smith and Nan Ides, Environmental Education Coordinators Environmental Protection Agency 841 Chestnut Street (3EA20) Philadelphia, PA 19107 (215) 566-5546 / Fax: (215) 566-5102

## The President's Environmental Youth Awards (PEYA) Program

Young people from each State are invited to participate in PEYA, a nationwide program designed to encourage individuals, school classes, summer camps, public interest groups, and youth organizations to promote environmental awareness and community involvement. The two components of the program are the regional certificate program and the National awards competition. Regional certificates, signed by the President, are awarded to each participant by EPA regional offices. National individual project winners, or one representative from a National awardwinning group project, along with one sponsor, are honored at EPA headquarters in Washington, DC. Interested K-12 individuals or groups may obtain application materials and contest rules by contacting the EPA Regional Office that serves their State. PEYA has been an ongoing project since it was created by the White House Office of Education and the EPA in 1971.

EPA Region 3 81 Chestnut Street (3EA20) Philadelphia, PA 19107 (215) 566-5543 / Fax: (215) 566-5102

# ► National Aeronautics and Space Administration (NASA)

#### **NASA Educator Resource Center**

The center has NASA-related educational materials in various formats, including laserdiscs, CD-ROMs, videotapes, slides, audiotapes, publications, and teacher guides. Educators may preview or copy NASA materials upon request.

Educator Resource LaboratoryNASA Goddard Space Flight Center Mail Code 130.3 Greenbelt, MD 20771-0001 (301) 286-8570

### **NASA Field Centers**

Each field center has an educational programs officer who is responsible for precollege education programs. In addition to administering National programs, the center offers programs and services to meet regional and local needs.

Education Programs NASA Goddard Space Flight Center Mail Code 130 Greenbelt, MD 20771-0001 (301) 286-7206

### NASA Regional Educator Resource Center (RERC)

To offer more educators the opportunity to visit the Educator Resource Center Network (ERCN), NASA forms partnerships with planetariums, universities, museums, and other nonprofit organizations to serve as RERCs. Teachers may preview or copy NASA materials upon request.

University of Pittsburgh School of Education Computer Curriculum Information Center NASA Regional Educator Resource Center 230 South Boquet Street Pittsburgh, PA 15260 (412) 648-7560/7558

### **Space Grant Consortium**

The Space Grant Consortium in each State consists of colleges, universities, industry, and other organizations that have an interest in aeronautics and space education. Each consortium receives NASA funds for use in implementing a balanced program of research, education, and public service.

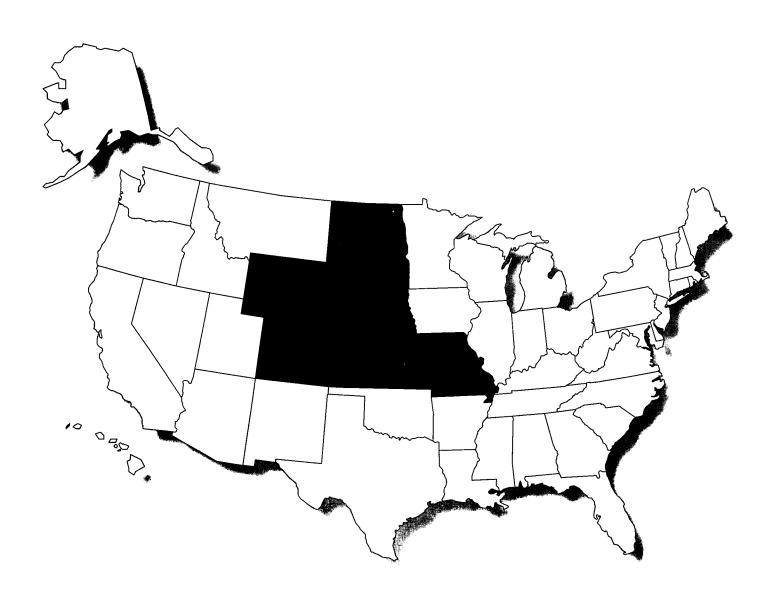
Pennsylvania Space Grant Consortium The Pennsylvania State University 101 South Frear University Park, PA 16802 (814) 863-7688



- ► Colorado
- ► Kansas
- **►** Missouri
- ▶ Nebraska
- ▶ North Dakota
- ▶ South Dakota
- **▶** Wyoming

# Mid-continent Region

Eisenhower High Plains Consortium for Mathematics and Science





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# Eisenhower High Plains Consortium for Mathematics and Science

# Mid-continent Region

he Eisenhower High Plains Consortium (HPC) for Mathematics and Science at McREL is one of the 10 Eisenhower Mathematics and Science Regional Consortia established by the U.S. Department of Education. The National Network of Eisenhower Regional Consortia and the Eisenhower National Clearinghouse for Mathematics and Science Education form a coordinated, field-based National infrastructure to promote systemic educational reform. The Consortium and the Mid-continent Regional Educational Laboratory (McREL) serve a seven-State region. HPC enhances and builds on existing resources, creating new partnerships that span district and State boundaries and link private and public schools, businesses, and industries. The Consortium facilitates ongoing projects, links programs through established communication networks, and maximizes the impact of existing resources in the seven-State region. Efforts are focused on four specific functions—communication, professional development, curriculum frameworks, and institutionalization.

In the area of communication, HPC promotes the use of electronic communication both within each State and within the region. Every attempt is made to work collaboratively with partners in each State to make technology more accessible to teachers and students. HPC has set up a listserv for mathematics educators that is accessible on the Internet. Conference calls initiated by the Consortium are used to promote communication among job-alike groups, such as the Statewide Systemic Initiative (SSI) State coordinators. HPC also serves as a facilitator on a number of topics to various groups throughout the region.

In the area of professional development, HPC has worked with key groups in each State, including the State education agency, to aid in the coordination of multiple State-level initiatives. These initiatives include emerging State curriculum frameworks and the teacher training necessary to refine, adapt, adopt, and implement the frameworks at the local level. Upon request, HPC also provides professional development on alternative assessment and curriculum framework development to numerous school districts. Professional development opportunities with optional graduate

credit are being provided or cosponsored by HPC during the summer in several States. HPC staff expertise in mathematics and science serves as a resource for teachers from kindergarten through post-secondary school.

In the area of curriculum framework development and refinement, HPC provides staff expertise and two Laboratory Network Program documents, *Curriculum Frameworks Analysis Tool* and *A Summary of Analyzed State Curriculum Frameworks*. HPC also has worked closely with State groups to facilitate the planning and writing of various grants to assist the State framework development process.

In the area of institutionalization, the Statelevel advisory teams are establishing a coordinated professional development effort within each State. Additionally, the shift from producing an HPC newsletter to submitting articles to State-level educational newsletters reflects an institutionalization process.

To assist teachers in their efforts to improve instructional practice, HPC seeks to identify "Promising Practices." The process has resulted in the identification of five programs to date. These programs are:

- ▶ CMEA-MESA is a multidisciplinary studies program in Denver, Colorado, which develops interest in science, engineering, and related fields, targeting minority student participation from grades 6–12. The program stimulates career awareness and motivation through field trips, role model speakers, competitions, incentive awards, college and career counseling, summer enrichment opportunities, and internships.
- ▶ MathVantage is a product of Nebraska mathematics teachers under the direction of the Nebraska Mathematics and Science Coalition in Lincoln. The MathVantage materials target seventh- and eighth-grade students, presenting mathematics from a different perspective—a different "vantage" point. These materials demonstrate a relevance to the student's life and emphasize active participation on the part of the student.
- ► Teaching Science Concepts Using
  Discrepant Events from Kansas State
  University in Manhattan is a compilation

of more than 250 discrepant scientific events that can be used by teachers of Earth science, physics, chemistry, and biology in upper-elementary or middle schools to stimulate students' interest and motivation. These discrepant events are written as hands-on investigation activities and minds-on exercises.

- ▶ Small Scale Science-STAR³ Program provides teachers of middle-level science (grades 5–9) with the necessary confidence and skills to employ small-scale science in the classroom. The program comprises an inquiry-based series of hands-on experiments that have been used successfully from upper-elementary through university classrooms.
- ► K-6 Science and Mathematics
  Enhancement Program (KSAM) from
  Southeast Missouri State University
  encourages the utilization of an effective,
  process-based instructional strategy in
  K-6 science and mathematics. KSAM provides teachers with process-based activities and training in addition to pertinent
  materials and support.

For additional information about these or other promising practices from around the country, contact HPC.

Dr. John Sutton,
Senior Director/Mathematics and
Collaboration

Alice Krueger, Senior Associate/Science and Collaboration

Arlene Mitchell, Senior Associate/Mathematics and Action Research

Elaine DeBassige, Program Associate/Nature Education Initiatives/Informal Education

Dr. Martha Henry, Senior Associate/Science and Collaboration

Jeff Johnson, Senior Associate/Technology, Mathematics and Case Studies

ERIC

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#### Phyllis Thomas,

Senior Associate/Evaluation

#### Greg Rawls,

Senior Associate/Science, Technology, and Collaboration

#### Deborah Jordan,

Senior Associate/Science, Assessment, and Collaboration

Eisenhower High Plains Consortium 2550 South Parker Road, Suite 500 Aurora, CO 80014 (800) 949-6387 (303) 337-0990 / Fax: (303) 337-3005 WWW: http://www.mcrel.org/hpc

### Colorado

### ▶ Department of Agriculture (USDA)

#### 4-H State Leader

The State 4-H Youth Development Programs are administered by the Cooperative Extension Service at land-grant universities. State 4-H leaders coordinate outreach services and training to all county offices.

Dr. Dorothy H. Martin, Assistant Director 4-H Youth Development Colorado State University 123 Aylesworth Hall, NW Fort Collins, CO 80523 (970) 491-6421 / Fax: (970) 491-5108 E-mail: state4h@shep.agsci.colostate.edu

#### Ag in the Classroom State Leader

This program promotes increased understanding of agriculture and possible careers in the agricultural sciences. With National leadership provided by USDA, each State manages its own programs, with assistance from agribusiness, educational institutions, and government.

Helen Davis Colorado Department of Agriculture 700 Kipling, #4000 Lakewood, CO 80215-5894 (303) 239-4114 / Fax: (303) 866-4073

Bette Blinde Colorado Foundation for Agriculture 28276 WRC15 Windsor, CO 80550 (303) 686-7806

## **▶** Department of Commerce (DOC)

### Environmental Research Laboratories

These laboratories offer guided tours, curriculum materials, and in-class presentations.

Carol Knight
Office of Oceanic and Atmospheric Research
National Oceanic and Atmospheric
Administration
Environmental Research Laboratories
325 Broadway
Boulder, CO 80303-3328
(303) 497-6401

## National Institute of Standards and Technology Student Programs

These programs provide employment for high school, undergraduate, and graduate level students who are pursuing courses in physical sciences, engineering, computer science, or mathematics.

Mary Bruner National İnstitute of Standards and Technology 325 Broadway, MS 360.06 Boulder, CO 80303 (303) 497-5507

## ► Department of Education (ED)

## Eisenhower High Plains Consortium for Mathematics and Science

The Eisenhower Regional Consortium provides information and technical assistance to help States and school districts improve mathematics and science education.

John Sutton, Director
Eisenhower High Plains Consortium for
Mathematics and Science
2550 South Parker Road, Suite 500
Aurora, CO 80014
(800) 949-6387
(303) 337-0990 / Fax: (303) 337-3005
E-mail: jsutton@mcrel.org
WWW: http://www.mcrel.org/hpc

#### **Eisenhower State Coordinators**

Eisenhower State Coordinators administer the Eisenhower Professional Development Program State Formula grants. The program focuses on sustained and intensive high-quality professional development through inservice programs. Mattye Pollard-Cole Eisenhower Professional Development Program Colorado Department of Education 201 East Colfax Avenue Denver, CO 80203 (303) 866-6763 / Fax: (303) 830-0793

## **Eisenhower State Coordinators** for Higher Education

Eisenhower State Coordinators oversee the Eisenhower Professional Development State Formula Grants for the State Agency for Higher Education (SAHE). The program focuses on teacher enhancement through both inservice and preservice programs.

Dr. Sharon Samson, Academic Officer Colorado Commission on Higher Education 1300 Broadway, Second Floor Denver, CO 80203 (303) 866-2723 / Fax: (303) 860-9750

## Mid-continent Regional Educational Laboratory (McREL)

McREL identifies effective teaching techniques and school improvement efforts within the region and shares this information with State and local educators.

Tim Waters, Executive Director Mid-continent Regional Educational Laboratory 2550 South Parker Road, Suite 500 Aurora, CO 80014 (800) 949-6387 (303) 337-0990 / Fax: (303) 337-3005

# Pacific and Southwest Regional Technology in Education Consortium (PSR\*TEC)

ED established the Regional Technology in Education Consortia (R\*TEC) program in the fall of 1995 to help States, districts, schools, adult literacy centers, and other educational institutions use advanced technology to support improved teaching and student achievement. R\*TEC's role in educational technology is unique in two ways: the emphasis is regional and the primary goal is to ensure that technology is used effectively to support school reform. Program strategies include professional development, technical assistance, and information dissemination.

Kevin Rocap, Director
PSR\*TEC
Center for Language Minority Education and
Research
c/o College of Education
California State University, Long Beach
1250 Bellflower Boulevard
Long Beach, CA 90840-2201
(310) 985-1570 / Fax: (310) 985-4528
E-mail: krocap@csulb.edu
WWW: http://www.csulb.edu/~clmer/
pswrtc/pswrtc.html



Neal Kaske, R\*TEC Project Officer U.S. Department of Education Office of Educational Research and Improvement Office of Library Programs, Room 300h 555 New Jersey Avenue NW Washington, DC 20208-5571 (202) 219-1871 E-mail: nkaske@inet.ed.gov

## ► Department of Energy (DOE)

## Adventures in Supercomputing (AiS)

The AiS program is designed to foster and enhance the participation of diverse populations of high school students in mathematics, science, and computing.

Barbara G. Summers, Education Program Manager Oak Ridge National Laboratory Office of University and Science Education PO Box 2008, MS 6366 Oak Ridge, TN 37831-6366 (423) 241-3705 / Fax: (423) 241-6776 E-mail: summersbg@ornl.gov

### National Renewable Energy Laboratory (NREL)

NREL provides teacher workshops, student internships, and summer programs for students and teachers. It works with several partnership programs, including NSF Colorado Statewide Systemic Initiative. NREL conducts student competitions and is the National contact for the Junior Solar Spring Competition.

Linda Lung, Education Programs Manager 1617 Cole Boulevard, Building 15 Golden, CO 80401-3933 (303) 275-3044 / Fax: (303) 275-3076 E-mail: linda\_lung@nrel.gov

### **Rocky Flats Plant**

This facility sponsors teacher workshops and programs for students, along with a variety of outreach assistance and support programs.

Laura Schachter Rocky Flats Office PO Box 928 Golden, CO 80402-0928 (303) 966-2200 / Fax: (303) 966-3418

### Western Area Power Administration (WAPA)

WAPA conducts the Colorado Regional Science Bowl, an academic competition sponsored by DOE and the community. Held each February, the Bowl encourages the study of science and mathematics and the pursuit of related careers. Participants in the competition include Native American and other minority students from the State of Colorado. The regional winner advances to the National Competition, held each spring in Washington, DC.

Mary D'Amato
Western Area Power Administration—
Loveland
PO Box 3700
Golden, CO 80539
(303) 490-7201 / Fax: (303) 490-7213

Ernie Baier Western Area Power Administration— Montrose 1800 South Rio Grande Avenue Montrose, CO 81401 (303) 240-6248 / Fax: (303) 240-6254

## **▶**Department of the Interior (DOI)

### Anasazi Heritage Center

This center provides resources and classroom activities in such areas as archaeology, geography, science, history, and English.

Anasazi Heritage Center 27501 Highway 184 PO Box 758 Dolores, CO 81323 (303) 882-4811

#### Bureau of Indian Affairs (BIA)

Natural Resources in Mathematics and Science for Schools is a program held to provide educators from BIA schools with both reference information and curricula-inspiring expertise. The goal is to help sixth through 12th grade Native American students attending BIA schools understand the importance of the petroleum industry to the American society; how oil and natural gas are formed and produced; and the economic impact of oil and gas revenues on Tribal governments and individual mineral owners. Through this effort, BIA teachers will be able to better prepare their students, many of whom will become heirs to tribal and family mineral resources, for future responsibilities.

A guest speaker is periodically scheduled for Natural Resources Management Classes to discuss the importance of oil and gas to our society. Topics include how resources are produced, refined, and used and what types of work are available in private industry and government. These classes are used to acquaint college students with the petroleum industry and the economic impact of revenues for owners who are Native American.

William Trujillo, Senior Program Analyst Box 25165, MS 3010 Denver, CO 80225 (303) 231-3350 / Fax: (303) 231-3780

### Bureau of Land Management State Office

This office provides information about educational programs, materials, and local land-management issues.

Public Affairs Specialist Bureau of Land Management Colorado State Office Office of External Affairs 2850 Youngfield Street Lakewood, CO 80215 (303) 239-3671

#### **Bureau of Reclamation**

The Archaeology and Public Education program encourages the incorporation of archaeology into schools. The Bureau's personnel go into classrooms to assist teachers, give talks at senior citizen groups, etc. The Bureau also provides funding to other organizations to help them pursue archaeology and education.

A variety of environmental subjects, with an emphasis on water resources, is offered to teachers and students in grades K-12. Subjects vary from groundwater model to instant snow storms and wetlands in a pan. Programs are presented in the classroom as well as outdoors at laboratory schools, summer camps, and at some visitor centers. The program currently operates in the States of California, Colorado, Montana, Nevada, Idaho, and Utah. For example, the groundwater model is used to show effects of various pollutions of groundwater. Programs can be given in short sessions at water festivals, education fairs, and State/county fairs, or in longer sessions for classroom instruction.

Edward Friedman, Federal Preservation Officer Denver Federal Center D-5650 Denver, CO 80225 (303) 236-1061 / Fax: (303) 236-0890

Theresa Taylor, Environmental Education Program Assistant Denver Federal Center, D-5100 Building 67 Denver, CO 80225 (303) 236-9336, ext. 262 / Fax: (303) 236-3573

## Bureau of Reclamation Hydraulic Laboratory

This lab offers tours and demonstrations of working models of reclamation projects, including modern and unique instrumentation and testing equipment used by engineers.



Phil Burgi Bureau of Reclamation PO Box 25007 (D-3700) Denver, CO 80225-0007 (303) 236-5985 / Fax: (303) 236-4096

#### Colorado National Monument

The monument offers guided walks and teacher guides that focus primarily on environmental education and geology.

The Young Naturalists program consists of week-long workshops for youngsters ages 9–12 who are interested in learning about the environs of western Colorado. Each morning the group visits a different site with professional interpreters from agencies including USDA-Forest Service, Colorado Division of Wildlife, NPS, BLM, U.S. Fish and Wildlife. Topics are "See the Forest for the Trees," "Water, Water Everywhere?" and "Like Pieces in a Puzzle."

Ron Young, Chief of Interpretation Colorado National Monument Association Colorado National Monument Fruita, CO 81521 (303) 858-3617

### Colorado River Hydroexplorer

In this program game, students guide a minisubmarine, Hydroexplorer, down the length of the Colorado River from its headwaters in Colorado, Utah, Wyoming, and New Mexico through Arizona, Nevada, and California to Mexico and the Sea of Cortez. Along the way, students study the many uses of the river: recreation, power generation, agriculture and irrigation, wildlife habitat protection, and urban use for industry and homes. They look at where the water comes from, how it carves the land, why it has sediments and salts in it. how it was explored, and how its waters have been divided by the States it flows through. Ultimately, students learn that since there are so many uses of the water and there is a limited supply, it is important to conserve water in their homes and schools.

Steve Jones, Water Conservation Manager PO Box 61470 Boulder City, NV 89005 (702) 293-8196 / Fax: (702) 293-8042

## Curecanti National Recreation Area

In the spring and fall, environmental education outreach programs are offered for grades K-8. Curriculum materials are provided for both teachers and students. Educators may choose in-class presentations or onsite day field trips.

Curecanti National Recreation Area Environmental Education Outreach Program/ Curecanti Teacher Continuing Education Workshops are available. Opportunities include extensive year-round, onsite educational programs, field experiences, computer resource systems, onsite classrooms, college internship program, GIS and Internet capability, and graduate teacher continuing education workshops.

Phil Zichterman, Chief, Interpretation and Education National Park Service Curecanti National Recreation Area 102 Elk Creek Gunnison, CO 81230 (303) 641-2337, ext. 227 / Fax: (303) 641-3127 E-mail: phil\_zichterman@cure.pps.gov

#### **Dinosaur National Monument**

The Environmental Education Outreach Program focuses on how the Dinosaur National Monument preserves part of the ecosystem in which we live. The program discusses ecosystem workings, communities in the ecosystem, human impacts on the ecosystem, and how to sustain the ecosystem.

David Whitman, Chief of Interpretation Dinosaur National Monument 4545 East Highway 40 Dinosaur, CO 81610-9724 (303) 374-2216

### Earth Science Information Center, Lakewood

This center offers information and sales service for U.S. Geological Survey map products and Earth science publications.

Lakewood ESIC Denver Federal Center, MS 504 Box 25046, Building 810 Denver, CO 80225-0046 (303) 236-5829

#### Florissant Fossil Beds

Orientation to the Fossil Beds is geared for all age groups with age-appropriate curriculum packets and activities. Also offered is the history of Colorado with an onsite visit to historic Homestead and other programs, including Exploring Ecosystems and Endangered Species. Half-day field seminars are given in the summer with varied topics. The teacher course is titled Introduction to the Natural Sciences.

Margaret Johnston, Chief Ranger Florissant Fossil Beds PO Box 185 Florissant, CO 80816 (719) 748-3253 / Fax: (719) 748-3164

### Mesa Verde National Park

The park offers guided tours for educators. Programs concentrate primarily on anthropology and history. A teacher guide provides a series of suggested curricula and activities to enhance visits to the park. It also includes some travel/logistical information.

Sarah Craighead, Assistant Chief of Interpretation Mesa Verde National Park PO Box 8 Mesa Verde National Park, CO 81330 (303) 529-4475 / Fax: (303) 529-4498

### Mid-Continent Ecological Science Center

Programs include natural resources management courses that provide training for professional resource managers in areas such as instream flow, incremental methodology, habitat evolution procedures, managing environmental conflict, and supporting software.

Thomas J. O'Shea, Assistant Director Mid-Continent Ecological Science Center 4512 McMurry Avenue Fort Collins, CO 80525 (303) 226-9397 / Fax: (303) 226-9230

### Minerals Management Service (MMS) Regional Office

This office provides a range of educational services. Teacher inservice programs and classroom visitations may include supplemental materials. Availability may be limited, but arrangements may be made for duplication of some materials at minimal cost.

Royalty Management Program Minerals Management Service Office of Public Affairs 1201 Elmwood Park Boulevard, MS 500 PO Box 25165 Lakewood, CO 80225 (303) 231-3162 / Fax: (303) 231-3780

### **Morrow Point Dam**

Located on the Gunnison River, the Visitor Center offers information and self-guided tours of the facility.

Jayne Kelleher Public Affairs Office Upper Colorado Region Bureau of Reclamation PO Box 11568 (UC-140) Salt Lake City, UT 84147-0568 (801) 524-6039

### Pathways to Fishing

The program acquaints children ages 7–11 who have little or no fishing experience with fishing basics, aquatic ecology, angler ethics, and fish biology.

Will Tully, Environmental Specialist Eastern Colorado Area Office 11-56 West County Road, 18E Loveland, CO 80537 (303) 962-4368 / Fax: (303) 663-3212



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## Project Water Education for Teachers (WET)

Project WET is an interdisciplinary water education program intended to supplement a school's existing curriculum. Classroom-ready teaching aides being developed include activity guides and modules for grades K–12, computer simulations, water-history publications, groundwater flow models, and a series of children's story and action books.

Chris Bridges, Project WET Coordinator Colorado Water Conservation Board 1313 Sherman Street, Room 721 Denver, CO 80203 (303) 866-3441

### **Project WILD**

Project WILD offers teacher training and educational materials. Teacher guides, free to teachers who attend the training session, contain more than 80 supplementary, interdisciplinary activities for grades K–12.

Jeff Rucks, Acting Project WILD Coordinator Colorado Division of Wildlife 6060 North Broadway Denver, CO 80216 (303) 291-7262, ext. 7300 Fax: (303) 294-0874

### Ridgeway Dam

The Visitor Center offers self-guided nature walks and educational programs for students.

Jayne Kelleher Public Affairs Office Upper Colorado Region Bureau of Reclamation PO Box 11568 (UC-140) Salt Lake City, UT 84147-0568 (801) 524-6039

## Rocky Mountain Arsenal National Wildlife Refuge

The refuge is located 10 miles from downtown Denver on the doorstep of 2 million city dwellers who have few opportunities to connect with the natural world. The unique history of this site—as an area where indigenous people hunted and roamed; where settlers built ditches, ponds, and farmsteads; where the U.S. Army manufactured chemical weapons for use in World War II and during the Cold War; where private corporations created pesticides for agricultural use; and now where the U.S. Fish and Wildlife Service will manage one of the Nation's largest urban wildlife refuges—makes this a special place for examining the relationship of people with nature. The overall message of all educational activities is that people need to help overcome past environmental mistakes and take responsibility for making the refuge and elsewhere better places.

Service staff and volunteers lead environmental education programs for grades K–12 at the refuge. Programs are grade-specific and offered year round at no charge. Each teacher receives the Rocky Mountain Arsenal National Wildlife Area Teacher Resource Guide (developed in cooperation with the Denver Museum of Natural History), which includes pre- and post-visit activities for grades 4–12. As part of a cooperative agreement with the Service, the Colorado Wildlife Federation conducts educational presentations in the schools to prepare students for their trips to the refuge. In FY94, 17,000 students participated in environmental education programs.

Debbie Long, Supervisory Education Specialist U.S. Fish and Wildlife Service Rocky Mountain Arsenal NWR Building 11 Commerce City, CO 80022-1748 (907) 289-0232 / Fax: (303) 289-0579

### Rocky Mountain National Park

Programs at the park include guided nature tours and lectures that focus on geology, ecology, and environmental education.

Division of Interpretation Rocky Mountain National Park Estes Park, CO 80517 (303) 586-2371

### Scientists in the Schools

Regional Office scientists adopt local schools and provide environmental education services to these schools through classroom presentations and involvement in school activities. Scientists attend optional training to enhance their teaching skills. Participants do not necessarily need a scientific background to be contributing members of the program.

Sheri Fetherman, Chief, Branch of Education and Visitor Services PO Box 25486, DFL Denver, CO 80225 (303) 236-8145, ext. 649 Fax: (303) 236-4792

### Texas Creek Riparian Area

In the Outdoor Classroom program, students travel to the Texas Creek Riparian Area to learn about fish sampling, macroinvertebrates, birds, ecosystems, and management of natural resources. Presenters are BLM and USFS employees and teachers.

Ken Smith Bureau of Land Management 3170 East Main Street Canon City, CO 81212 (719) 269-8500

### Water Resources Education Initiative

This program is developing water resources educational materials for students in grades K–12. Materials include a series of educational posters about water resources and a set of outreach notebooks for use by water resources professionals when visiting educational settings.

Steve Vandas, Hydrologist United State Geological Survey PO Box 25046, DFC, MS 414 Denver, CO 80225 (303) 236-4937 / Fax: (303) 236-4937

## ► Department of Labor (DOL)

## Job Training Partnership Act (JTPA) Liaison

The JTPA Liaison can provide information about the Job Training Partnership Act State and local programs for economically disadvantaged adults and youth.

Leslie S. Franklin, Executive Director Governor's Job Training Office 720 South Colorado Boulevard, Suite 550 Denver, CO 80222 (303) 758-5020 / Fax: (303) 758-5578

## ► Department of Transportation (DOT)

## Federal Aviation Administration (FAA) Aviation Education

The FAA Aviation Education Representative coordinates aviation education services, including materials and programs for the FAA in the States assigned to the region.

Programs include the following:

The Aviation Career Education (ACE)
Academy is a one-week summer aviation
education program for high school students sponsored by the FAA along with a
host educational institution. The program
provides students with diverse experiences
in aviation career exploration. The focus
is on aviation career clusters identified by
FAA, with an emphasis on opportunities
for women and minorities. A goal is to
have one program in each State and U.S.
Territory. The FAA will conduct regional
leadership workshops and provide funds
based on the availability of resources.



- ▶ Aviation Education Workshops for Teachers provide teachers with information on FAA aviation programs and materials and prepare them to teach aviation in the classroom. Annual workshops are conducted at colleges and universities across the Nation. The FAA provides information, materials, and speakers for the program.
- ▶ National Congress on Aviation and Space Education is sponsored annually by the FAA in partnership with the National Aeronautics and Space Administration and the Civil Air Patrol. The meeting includes teacher workshops and crosstalk sessions to exchange ideas on promoting aerospace education.

Herman Payton, ANM-14A, FAA Aviation Education Representative 1601 Lind Avenue SW Renton, WA 98055-4056 (206) 227-2079 / Fax: (206) 227-1010

## FAA Aviation Education Resource Centers

Located at colleges, museums, and State aviation authority offices, these centers function as information distribution centers for Federal Aviation Administration education materials and resources. The Resource Centers maintain and provide quantities of printed materials, videotapes, and computer educational software. Center personnel can also provide general information, conduct workshops, and make aviation-related presentations.

Jonathan R. Burke, Assistant Professor Aviation Education Resource Center Metropolitan State College of Denver Aerospace Science Department Campus Box 30, PO Box 173362 Denver, CO 80217-3362 (303) 556-2923

Dr. Jerry Brown, Educational Director Aviation Education Resource Center U.S. Space Foundation 2860 South Circle Drive, Suite 2301 Colorado Springs, CO 80906-4181 (719) 576-8000

Herman Payton, ANM-14A, FAA Aviation Education Representative 1601 Lind Avenue SW Renton, WA 98055-4056 (206) 227-2079 / Fax: (206) 227-1010

## ► Environmental Protection Agency (EPA)

### **EPA Regional Office**

This office takes part in a variety of environmental education programs for both teachers and students. Programs range from teacher workshops and student contests to in-school presentations. Information on environmental issues is also available through the Public Information Center located at the office.

Cece Forget, Environmental Education Coordinator Environmental Protection Agency One Denver Place (OCPI) 999 18th Street, Suite 500 Denver, CO 80202-2405 (303) 312-6605 / Fax: (303) 312-6961

## The President's Environmental Youth Awards (PEYA) Program

Young people from each State are invited to participate in PEYA, a Nationwide program designed to encourage individuals, school classes, summer camps, public interest groups, and youth organizations to promote environmental awareness and community involvement. The two components of the program are the regional certificate program and the National awards competition. Regional certificates, signed by the President, are awarded to each participant by EPA Regional Offices. National individual project winners, or one representative from a National awardwinning group project, along with one sponsor, are honored at EPA headquarters in Washington, DC. Interested K-12 individuals or groups may obtain application materials and contest rules by contacting the EPA Regional Office that serves their State. PEYA has been an ongoing project since it was created by the White House Office of Education and the EPA in 1971.

EPA Region 8 999 18th Street Denver, CO 80202-2466 (303) 312-6605 / Fax: (303) 312-6961

### ► National Aeronautics and Space Administration (NASA)

### **NASA Educator Resource Center**

The Center has NASA-related educational materials in various formats, including laserdiscs, CD-ROMs, videotapes, slides, audiotapes, publications, and teacher guides. Educators may preview or copy NASA materials upon request.

U.S. Space Foundation NASA Regional Educator Resource Center 2860 South Circle Drive, Suite 2301 Colorado Springs, CO 80906-4184 (719) 576-8000

NASA Johnson Space Center Educator Resource Center Mail Code AP-2 2101 NASA Road One Houston, TX 77058-3696 (713) 483-8696

### **NASA Field Centers**

Each field center has an educational programs officer who is responsible for precollege education programs. In addition to administering National programs, the center offers programs and services to meet regional and local needs.

Dr. Robert W. Fitzmaurice, Center Education Programs Officer Public Affairs Office AP2 NASA Johnson Space Center 2101 NASA Road One Houston, TX 77058-3696 (713) 483-1257

#### **Space Grant Consortium**

The Space Grant Consortium in each State consists of colleges, universities, industry, and other organizations that have an interest in aeronautics and space education. Each consortium receives NASA funds for use in implementing a balanced program of research, education, and public service.

Colorado Space Grant Consortium University of Colorado at Boulder Campus Box 520 Boulder, CO 80309-0520 (303) 492-3141

### National Science Foundation (NSF)

## Statewide Systemic Initiatives (SSI) Program

The Colorado SSI Program, CONNECT, seeks to develop a centralized enabling structure for bottom-up changes by making extensive use of existing successful efforts. It uses the State's local collaborative partnerships, regional collaboratives, and a State infrastructure to engage the public, link standards development with actual change, and provide leadership.

William Randall, Project Director CONNECT 1580 Logan, Suite 740 Denver, CO 80203 (303) 894-2140 / Fax: (303) 894-2141



Henry Heikkinen Department of Chemistry University of Northern Colorado Greeley, CO 80639 (303) 351-1289, ext. 1280 Fax: (303) 351-1269

### **Kansas**

### ▶ Department of Agriculture (USDA)

#### 4-H State Leader

The State 4-H Youth Development Programs are administered by the Cooperative Extension Service at land-grant universities. State 4-H leaders coordinate outreach services and training to all county offices.

Dr. Gary W. Gerhard, Assistant Extension Director 4-H and Youth Development Kansas State University Umberger Hall, Room 201 Manhattan, KS 66506-3404 (913) 532-5800 / Fax: (913) 532-5981 E-mail: ggerhard@oz.oznet.ksu.edu

### Ag in the Classroom State Leader

This program promotes increased understanding of agriculture and possible careers in the agricultural sciences. With National leadership provided by USDA, each State manages its own programs, with assistance from agribusiness, educational institutions, and government.

Sandra Kramer Kansas State University 124 Bluemont Hall Manhattan, KS 66506 (913) 532-7946 / Fax: (913) 532-7304

### ▶ Department of Education (ED)

## Eisenhower High Plains Consortium for Mathematics and Science

The Eisenhower Regional Consortium provides information and technical assistance to help States and school districts improve mathematics and science education.

John Sutton, Director
Eisenhower High Plains Consortium for
Mathematics and Science
2550 South Parker Road, Suite 500
Aurora, CO 80014
(800) 949-6387
(303) 337-0990 / Fax: (303) 337-3005
E-mail: jsutton@mcrel.org
WWW: http://www.mcrel.org/hpc

#### **Eisenhower State Coordinators**

Eisenhower State Coordinators administer the Eisenhower Professional Development Program State Formula grants. The program focuses on sustained and intensive highquality professional development through inservice programs.

Kenneth Gentry
Eisenhower Professional Development
Program
Kansas Department of Education
120 East 10th Street
Topeka, KS 66612-1182
(913) 296-2306 / Fax: (913) 296-7933

## Eisenhower State Coordinators for Higher Education

Eisenhower State Coordinators oversee the Eisenhower Professional Development State Formula Grants for the State Agency for Higher Education (SAHE). The program focuses on teacher enhancement through both inservice and preservice programs.

Dr. John F. Welsh Eisenhower Professional Development Program Kansas Board of Regents 400 SW Eighth Street, Suite 609 Topeka, KS 66603 (913) 296-3421 / Fax: (913) 296-0983

## Mid-continent Regional Educational Laboratory (McREL)

The Regional Educational Laboratory identifies effective teaching techniques and school improvement efforts within the region and shares this information with State and local educators.

Tim Waters, Executive Director Mid-continent Regional Educational Laboratory 2550 South Parker Road, Suite 500 Aurora, CO 80014 (800) 949-6387 (303) 337-0990 / Fax: (303) 337-3005

# South Central Regional Technology in Education Consortium (SCR\*TEC)

ED established the Regional Technology in Education Consortia (R\*TEC) program in the fall of 1995 to help States, districts,

schools, adult literacy centers, and other educational institutions use advanced technology to support improved teaching and student achievement. R\*TEC's role in educational technology is unique in two ways: the emphasis is regional and the primary goal is to ensure that technology is used effectively to support school reform. Program strategies include professional development, technical assistance, and information dissemination.

Ron Aust and Jerry D. Chaffin, Co-Directors SCR\*TEC
Center for Research on Learning
University of Kansas
Dole Human Development Building—Suite
2021
Lawrence, KS 66045
(913) 864-0699 or 4954
Fax: (913) 864-4149
E-mail: aust@scrtec.org or jchaffin@scrtec.org

Stephen Balkcom, R\*TEC Project Officer U.S. Department of Education Office of Educational Research and Improvement ORAD/SLSD, Room 506g 555 New Jersey Avenue NW Washington, DC 20208-5644 (202) 219-2089 E-mail: sbalkcom@inet.ed.gov

WWW: http://scrtec.org/

## ► Department of the Interior (DOI)

### **Bureau of Land Management State Office**

This office provides information about educational programs, materials, and local land-management issues.

Theresa Herrera Bureau of Land Management PO Box 27115 Santa Fe, NM 87502-0115 (505) 438-7841

### **Project WILD**

Project WILD offers teacher training and educational materials. Teacher guides, free to teachers who attend the training session, contain more than 80 supplementary, interdisciplinary activities for grades K–12.

Roland Stein, Project WILD Coordinator Kansas Department of Wildlife and Parks Rural Route 2, Box 54A Pratt, KS 67124 (316) 672-5911 / Fax: (316) 672-6020



Connie Elpers, Project WILD Coordinator 455 North Main, 11th Floor Wichita, KS 67202 (316) 722-7929 / Fax: (316) 268-4567

### **Quivira National Wildlife Refuge**

The refuge offers teacher workshops to educators who wish to use it as an outdoor classroom. It is also the State host for the Federal Junior Duck Stamp Program, a National arts curriculum/conservation program. Quivira receives the Kansas artwork, hosts the contest judging, and handles the artwork. Curriculum guides and entry forms are sent out in the fall. These materials can be acquired from the refuge if teachers have not received the information from Washington, DC.

Briedi Zinn, Refuge Operations Specialist Quivira NWR RR3, Box 48A Stafford, KS 67578 (316) 486-2393

## ► Department of Labor (DOL)

## Job Training Partnership Act (JTPA) Liaison

The JTPA Liaison can provide information about the Job Training Partnership Act State and local programs for economically disadvantaged adults and youth.

Joe Dick, Secretary Kansas Department of Human Resources 401 Topeka Boulevard Topeka, KS 66603 (913) 296-7474 / Fax: (913) 296-0179

## ► Department of Transportation (DOT)

## Federal Aviation Administration (FAA) Aviation Education

The FAA Aviation Education Representative coordinates aviation education services, including materials and programs for the FAA in the States assigned to the region.

Programs include the following:

▶ The Aviation Career Education (ACE)
Academy is a one-week summer aviation
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in aviation career exploration. The focus
is on aviation career clusters identified by
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for women and minorities. A goal is to have one program in each State and U.S. Territory. The FAA will conduct regional leadership workshops and provide funds based on the availability of resources.

- ▶ Aviation Education Workshops for Teachers provide teachers with information on FAA aviation programs and materials and prepare them to teach aviation in the classroom. Annual workshops are conducted at colleges and universities across the Nation. The FAA provides information, materials, and speakers for the program.
- ▶ National Congress on Aviation and Space Education is sponsored annually by the FAA in partnership with the National Aeronautics and Space Administration and the Civil Air Patrol. The meeting includes teacher workshops and crosstalk sessions to exchange ideas on promoting aerospace education.

Maria Navarro, ACE-10, FAA Aviation Education Representative 601 East 12th Street Federal Building, Room 1501 Kansas City, MO 64106 (816) 426-3046 / Fax: (816) 426-3091

### FAA Aviation Education Resource Centers

Located at colleges, museums, and State aviation authority offices, these centers function as information distribution centers for Federal Aviation Administration education materials and resources. The resource centers maintain and provide quantities of printed materials, videotapes, and computer educational software. Center personnel can also provide general information, conduct workshops, and make aviation-related presentations.

Edward E. Berger, President Aviation Education Resource Center Hutchinson Community College 1300 North Plum Hutchinson, KS 67501 (316) 665-3505

Karlene Propst Aviation Education Resource Center Kansas State University, Salina Tullis Library 2408 Scanlan Avenue Salina, KS 67401 (913) 825-0275

Patricia Altwegg Cloud County Community College Box 1002 2221 Campus Drive Concordia, KS 66901 (800) 729-5101

## ► Environmental Protection Agency (EPA)

### **EPA Regional Office**

This office takes part in a variety of environmental education programs for both teachers and students. Programs range from teacher workshops and student contests to in-school presentations. Information on environmental issues is also available through the Public Information Center located at the office.

Rowena Michaels, Environmental Education Coordinator Environmental Protection Agency 726 Minnesota Avenue Kansas City, KS 66101 (913) 551-7003 / Fax: (913) 551-7066

## The President's Environmental Youth Awards (PEYA) Program

Young people from each State are invited to participate in PEYA, a Nationwide program designed to encourage individuals, school classes, summer camps, public interest groups, and youth organizations to promote environmental awareness and community involvement. The two components of the program are the regional certificate program and the National awards competition. Regional certificates, signed by the President, are awarded to each participant by EPA Regional Offices. National individual project winners, or one representative from a National awardwinning group project, along with one sponsor, are honored at EPA headquarters in Washington, DC. Interested K-12 individuals or groups may obtain application materials and contest rules by contacting the EPA Regional Office that serves their State. PEYA has been an ongoing project since it was created by the White House Office of Education and the EPA in 1971.

EPA Region 7 726 Minnesota Avenue Kansas City, KS 66101 (913) 551-7003 / Fax: (913) 551-7066

# ► National Aeronautics and Space Administration (NASA)

#### **NASA Educator Resource Center**

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NASA Johnson Space Center Educator Resource Center Mail Code AP-2 2101 NASA Road One Houston, TX 77058-3696 (713) 483-8696

#### **NASA Field Centers**

Each field center has an educational programs officer who is responsible for precollege education programs. In addition to administering National programs, the center offers programs and services to meet regional and local needs.

Dr. Robert W. Fitzmaurice, Center Education Programs Officer Public Affairs Office AP2 NASA Johnson Space Center 2101 NASA Road One Houston, TX 77058-3696 (713) 483-1257

### NASA Regional Educator Resource Center (RERC)

To offer more educators the opportunity to visit the Educator Resource Center Network (ERCN), NASA forms partnerships with planetariums, universities, museums, and other nonprofit organizations to serve as RERCs. Teachers may preview or copy NASA materials upon request.

Kansas Cosmosphere and Space Center NASA Regional Educator Resource Center 1100 North Plum Hutchinson, KS 67501-1499 (316) 662-2305, (800) 397-0330

### **Space Grant Consortium**

The Space Grant Consortium in each State consists of colleges, universities, industry, and other organizations that have an interest in aeronautics and space education. Each consortium receives NASA funds for use in implementing a balanced program of research, education, and public service.

Kansas Space Grant Consortium University of Kansas Department of Aerospace Engineering 2004 Learned Hall Lawrence, KS 66045-2221 (913) 864-4265

### Missouri

## ► Department of Agriculture (USDA)

#### 4-H State Leader

The State 4-H Youth Development Programs are administered by the Cooperative Extension Service at land-grant universities. State 4-H leaders coordinate outreach services and training to all county offices.

Dr. L. Jo Turner, Director, 4-H Youth University of Missouri 212 Whitten Hall Columbia, MO 65211 (573) 882-7430 / Fax: (573) 884-4225 E-mail: turnerj@ext.missouri.edu

### Ag in the Classroom State Leader

This program promotes increased understanding of agriculture and possible careers in the agricultural sciences. With National leadership provided by USDA, each State manages its own programs, with assistance from agribusiness, educational institutions, and government.

Diane Olsen Missouri Farm Bureau PO Box 658 Jefferson City, MO 65102 (573) 893-1400 / Fax: (573) 893-1540

### ▶ Department of Defense (DoD)

#### **U.S. Army Engineer Museum**

This museum offers guided tours and educational programs that focus on aspects of military engineering. Reservations are required.

U.S. Army Engineer Museum Attention: ATZT-PTM-PM Fort Leonard Wood, MO 65473-5165 (573) 596-0780

### ▶ Department of Education (ED)

## Eisenhower High Plains Consortium for Mathematics and Science

The Eisenhower Regional Consortium provides information and technical assistance to

help States and school districts improve mathematics and science education.

John Sutton, Director
Eisenhower High Plains Consortium for
Mathematics and Science
2550 South Parker Road, Suite 500
Aurora, CO 80014
(800) 949-6387
(303) 337-0990 / Fax: (303) 337-3005
E-mail: jsutton@mcrel.org
WWW: http://www.mcrel.org/hpc

#### **Eisenhower State Coordinators**

Eisenhower State Coordinators administer the Eisenhower Professional Development Program State Formula grants. The program focuses on sustained and intensive high-quality professional development through inservice programs.

Instructional Improvement and Resources Eisenhower Professional Development Program Missouri Department of Elementary and Secondary Education PO Box 480 Jefferson City, MO 65102 (314) 751-3520 / Fax: (314) 751-9434

Dr. Stephen Barr, Director

## **Eisenhower State Coordinators** for Higher Education

Eisenhower State Coordinators oversee the Eisenhower Professional Development State Formula Grants for the State Agency for Higher Education (SAHE). The program focuses on teacher enhancement through both inservice and preservice programs.

Ava L. Fajen
Eisenhower Professional Development
Program
Missouri State Institutions of Higher
Learning
Coordinating Board of Higher Education
3515 South Amazonas Street
Jefferson City, MO 65109
(314) 751-2361 / Fax: (314) 751-6635

## Mid-continent Regional Educational Laboratory (McREL)

The Regional Educational Laboratory identifies effective teaching techniques and school improvement efforts within the region and shares this information with State and local educators.

Tim Waters, Executive Director Mid-continent Regional Educational Laboratory 2550 South Parker Road, Suite 500 Aurora, CO 80014 (800) 949-6387 (303) 337-0990 / Fax: (303) 337-3005



# South Central Regional Technology in Education Consortium (SCR\*TEC)

ED established the Regional Technology in Education Consortia (R\*TEC) program in the fall of 1995 to help States, districts, schools, adult literacy centers, and other educational institutions use advanced technology to support improved teaching and student achievement. R\*TEC's role in educational technology is unique in two ways: the emphasis is regional and the primary goal is to ensure that technology is used effectively to support school reform. Program strategies include professional development, technical assistance, and information dissemination.

Ron Aust and Jerry D. Chaffin, Co-Directors SCR\*TEC

Center for Research on Learning
University of Kansas
Dole Human Development Building—Suite
2021

Lawrence, KS 66045 (913) 864-0699 or 4954 Fax: (913) 864-4149

E-mail: aust@scrtec.org or jchaffin@scrtec.org

WWW: http://scrtec.org/

Stephen Balkcom, R\*TEC Project Officer U.S. Department of Education Office of Educational Research and Improvement ORAD/SLSD, Room 506g 555 New Jersey Avenue NW Washington, DC 20208-5644 (202) 219-2089

### E-mail: sbalkcom@inet.ed.gov

### ▶Department of Energy (DOE)

### AlliedSignal Aerospace Company

In addition to establishing partnerships with local schools, AlliedSignal participates in career and science fairs and academic contests and provides tours of its facility.

Richard Bennett AlliedSignal Aerospace Company Federal Manufacturing and Technologies PO Box 419159, 2000 East 95th Street Kansas City, MO 64141-6159 (816) 997-5937 / Fax: (816) 997-7259

## ► Department of the Interior (DOI)

### Bureau of Land Management Eastern States Office

This office provides information about educational programs, materials, and local land-management issues.

Education Coordinator Bureau of Land Management 7450 Boston Boulevard Springfield, VA 22153 (703) 440-1713

### **Environmental and Contaminants Center**

Earth Stewards is a pilot program that uses the expertise of the Fish and Wildlife Service and National Biological Service (NBS) to educate school children and communities about fish and wildlife resources and local conservation problems.

In the Storm Drain Stenciling Project, NBS scientists teach youth groups basics about watersheds, aquatic ecology, and community service. Activities all lead to a community project: stenciling signs on storm drains to prevent dumping of hazardous waste.

Bill Mauck, Director Environmental and Contaminants Center 4200 New Haven Road Columbia, MO 65201 (573) 875-5399 / Fax: (573) 876-1896

### **Ozark National Scenic Riverways**

Programs include guided nature walks, ranger lectures, and cave tours. In-school activities are also available upon request.

Division of Interpretation Ozark National Scenic Riverways PO Box 493 Van Buren, MO 63965 (573) 323-4236

### **Project WILD**

Project WILD offers teacher training and educational materials. Teacher guides, free to teachers who attend the training session, contain more than 80 supplementary, interdisciplinary activities for grades K-12.

Bruce Evans Kansas City School District 301 East Armour Boulevard, Suite 620 Kansas City, MO 64111 (816) 871-6397 / Fax: (816) 871-6393 Jim Jordan Education Department St. Louis Zoo, Forest Park St. Louis, MO 83110 (314) 781-0900, ext. 340 Fax: (314) 647-7969

## ► Department of Labor (DOL)

## Job Training Partnership Act (JTPA) Liaison

The JTPA Liaison can provide information about the Job Training Partnership Act State and local programs for economically disadvantaged adults and youth.

Julie Gibson, Director
Division of Job Development and Training
Missouri Department of Economic
Development
221 Metro Drive
Jefferson City, MO 65109
(573) 751-7796 / Fax: (573) 751-6765

## ► Department of Transportation (DOT)

## Federal Aviation Administration (FAA) Aviation Education

The FAA Aviation Education Representative coordinates aviation education services, including materials and programs for the FAA in the States assigned to the region.

Programs include the following:

- ▶ The Aviation Career Education (ACE)
  Academy is a one-week summer aviation
  education program for high school students sponsored by the FAA along with a
  host educational institution. The program
  provides students with diverse experiences
  in aviation career exploration. The focus
  is on aviation career clusters identified by
  FAA, with an emphasis on opportunities
  for women and minorities. A goal is to
  have one program in each State and U.S.
  Territory. The FAA will conduct regional
  leadership workshops and provide funds
  based on the availability of resources.
- ➤ Aviation Education Workshops for Teachers provide teachers with information on FAA aviation programs and materials and prepare them to teach aviation in the classroom. Annual workshops are conducted at colleges and universities across the Nation. The FAA provides information, materials, and speakers for the program.



▶ National Congress on Aviation and Space Education is sponsored annually by the FAA in partnership with the National Aeronautics and Space Administration and the Civil Air Patrol. The meeting includes teacher workshops and crosstalk sessions to exchange ideas on promoting aerospace education.

Maria Navarro, ACE-10, FAA Aviation Education Representative 601 East 12th Street Federal Building, Room 1501 Kansas City, MO 64106 (816) 426-3046 / Fax: (816) 426-3091

### FAA Aviation Education Resource Centers

Located at colleges, museums, and State aviation authority offices, these centers function as information distribution centers for Federal Aviation Administration education materials and resources. The resource centers maintain and provide quantities of printed materials, videotapes, and computer educational software. Center personnel can also provide general information, conduct workshops, and make aviation-related presentations.

Al Myers, Director Lincoln University Career Advisement Planning and Placement Center 127 Thompkins Jefferson City, MO 65102-0029 (314) 681-5477

## ► Environmental Protection Agency (EPA)

### **EPA** Regional Office

This office takes part in a variety of environmental education programs for both teachers and students. Programs range from teacher workshops and student contests to in-school presentations. Information on environmental issues is also available through the Public Information Center located at the office.

Rowena Michaels, Environmental Education Coordinator Environmental Protection Agency 726 Minnesota Avenue Kansas City, KS 66101 (913) 551-7003 / Fax: (913) 551-7066

## The President's Environmental Youth Awards (PEYA) Program

Young people from each State are invited to participate in PEYA, a Nationwide program designed to encourage individuals, school classes, summer camps, public interest groups, and youth organizations to promote environmental awareness and community involvement. The two components of the program are the regional certificate program and the National awards competition. Regional certificates, signed by the President, are awarded to each participant by EPA Regional Offices. National individual project winners, or one representative from a National awardwinning group project, along with one sponsor, are honored at EPA headquarters in Washington, DC. Interested K-12 individuals or groups may obtain application materials and contest rules by contacting the EPA Regional Office that serves their State. PEYA has been an ongoing project since it was created by the White House Office of Education and the EPA in 1971.

EPA Region 7 726 Minnesota Avenue Kansas City, KS 66101 (913) 551-7003 / Fax: (913) 551-7066

# ► National Aeronautics and Space Administration (NASA)

#### **NASA Educator Resource Center**

The center has NASA-related educational materials in various formats, including laserdiscs, CD-ROMs, videotapes, slides, audiotapes, publications, and teacher guides. Educators may preview or copy NASA materials upon request.

U.S. Space and Rocket Center NASA Educator Resource Center for Marshall Space Flight Center PO Box 070015 Huntsville, AL 35807-7015 (205) 544-5812

#### **NASA Field Centers**

Each field center has an educational programs officer who is responsible for precollege education programs. In addition to administering National programs, the center offers programs and services to meet regional and local needs.

Jim Pruitt, Acting Director Education Programs Office Mail Code CL01 NASA Marshall Space Flight Center Huntsville, AL 35812-0001 (205) 544-8800

### Space Grant Consortium

The Space Grant Consortium in each State consists of colleges, universities, industry, and other organizations that have an interest in aeronautics and space education. Each con-

sortium receives NASA funds for use in implementing a balanced program of research, education, and public service.

Missouri Space Grant Consortium Washington University One Bookings Drive, Campus Box 1169 St. Louis, MO 63130-4899 (314) 935-5609

### Nebraska

### Department of Agriculture (USDA)

#### 4-H State Leader

The State 4-H Youth Development Programs are administered by the Cooperative Extension Service at land-grant universities. State 4-H leaders coordinate outreach services and training to all county offices.

Dr. Gary L. Heusel, State 4-H Program Leader 114 Agriculture Hall University of Nebraska Lincoln, NE 68583-0700 (402) 472-9009 / Fax: (402) 472-9024 E-mail: fhyd001@unlvm.unl.edu

### Ag in the Classroom State Leader

This program promotes increased understanding of agriculture and possible careers in the agricultural sciences. With National leadership provided by USDA, each State manages its own programs, with assistance from agribusiness, educational institutions, and government.

Ellen Hellerich Nebraska Farm Bureau Federation PO Box 80299 Lincoln, NE 68501 (402) 421-4400, ext. 2002 Fax: (402) 421-4432

### ▶ Department of Education (ED)

## Eisenhower High Plains Consortium for Mathematics and Science

The Eisenhower Regional Consortium provides information and technical assistance to help States and school districts improve mathematics and science education.



John Sutton, Director Eisenhower High Plains Consortium for Mathematics and Science 2550 South Parker Road, Suite 500 Aurora, CO 80014 (800) 949-6387 (303) 337-0990 / Fax: (303) 337-3005 E-mail: isutton@mcrel.org WWW: http://www.mcrel.org/hpc

#### **Eisenhower State Coordinators**

Eisenhower State Coordinators administer the Eisenhower Professional Development Program State Formula grants. The program focuses on sustained and intensive high-quality professional development through inservice programs.

James Woodland Eisenhower Professional Development Program Nebraska Department of Education PO Box 84987, 301 Centennial Mall South Lincoln, NE 68509 (402) 471-4329 / Fax: (402) 471-0117

### Eisenhower State Coordinators for **Higher Education**

Eisenhower State Coordinators oversee the Eisenhower Professional Development State Formula Grants for the State Agency for Higher Education (SAHE). The program focuses on teacher enhancement through both inservice and preservice programs.

Dr. Odus V. Elliott / Kathleen Fimple, Associate Academic Officer Eisenhower Professional Development Program Coordinating Commission for Postsecondary Education PO Box 95005 140 North Eighth Street Lincoln, NE 68509-5005 (402) 471-0021 or 0022 Fax: (402) 471-2886

### Mid-continent Regional Educational Laboratory (McREL)

The Regional Educational Laboratory identifies effective teaching techniques and school improvement efforts within the region and shares this information with State and local educators.

Tim Waters, Executive Director Mid-continent Regional Educational Laboratory 2550 South Parker Road, Suite 500 Aurora, CO 80014 (800) 949-6387 (303) 337-0990 / Fax: (303) 337-3005

### South Central Regional Technology in Education Consortium (SCR\*TEC)

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Ron Aust and Jerry D. Chaffin, Co-Directors SCR\*TEC Center for Research on Learning University of Kansas Dole Human Development Building-Suite Lawrence, KS 66045

(913) 864-0699 or 4954 Fax: (913) 864-4149 E-mail: aust@scrtec.org or jchaffin@scrtec.org WWW: http://scrtec.org/

Stephen Balkcom, R\*TEC Project Officer U.S. Department of Education Office of Educational Research and Improvement ORAD/SLSD, Room 506g 555 New Jersey Avenue NW Washington, DC 20208-5644 (202) 219-2089 E-mail: sbalkcom@inet.ed.gov

### **▶ Department of the Interior** (DOI)

### **Bureau of Land Management** State Office

This office provides information about educational programs, materials, and local landmanagement issues.

**Education Coordinator** Bureau of Land Management PO Box 1828, 2515 Warren Avenue Cheyenne, WY 82003 (307) 775-6001

### **Gavins Point National Fish** Hatchery and Aquarium

The hatchery/aquarium works with school districts, church groups, scout troops, senior citizens, and home school groups in South Dakota, Iowa, and Nebraska to provide an Outreach Program. Education opportunities are available in the areas of fishery biology, environmental education and awareness, watchable wildlife, aquatic science, and ecology. This program provides in-school and outdoor classroom learning opportunities.

Herb Bollig, Project Leader Gavins Point National Fish Hatchery and Aquarium RR 1. Box 293 Yankton, SD 57078

(605) 665-3352 / Fax: (605) 665-3360

### **Project WILD**

Project WILD offers teacher training and educational materials. Teacher guides, free to teachers who attend the training session, contain more than 80 supplementary, interdisciplinary activities for grades K-12.

Carl Wolfe, Project WILD Coordinator Game and Parks Commission PO Box 30370 Lincoln, NE 68503 (402) 471-0641 / Fax: (402) 471-5528

#### **Scotts Bluff National Monument**

Rangers present in-school and onsite lectures on the geology and history of the monument.

Division of Interpretation Scotts Bluff National Monument PO Box 427 Gering, NE 69341 (308) 436-4340

### **▶** Department of Labor (DOL)

### Job Training Partnership Act (JTPA) Liaison

The JTPA Liaison can provide information about the Job Training Partnership Act State and local programs for economically disadvantaged adults and youth.

Dan Dolan, Commissioner Nebraska Department of Labor PO Box 94600, 550 South 16th Street Lincoln, NE 68509-4600 (402) 471-9000 / Fax: (402) 471-2318

### ▶ Department of Transportation (DOT)

### **Federal Aviation Administration** (FAA) Aviation Education

The FAA Aviation Education Representative coordinates aviation education services. including materials and programs for the FAA in the States assigned to the region.

Programs include the following:

The Aviation Career Education (ACE) Academy is a one-week summer aviation education program for high school



students sponsored by the FAA along with a host educational institution. The program provides students with diverse experiences in aviation career exploration. The focus is on aviation career clusters identified by FAA, with an emphasis on opportunities for women and minorities. A goal is to have one program in each State and U.S. Territory. The FAA will conduct regional leadership workshops and provide funds based on the availability of

- ▶ Aviation Education Workshops for Teachers provide teachers with information on FAA aviation programs and materials and prepare them to teach aviation in the classroom. Annual workshops are conducted at colleges and universities across the Nation. The FAA provides information, materials, and speakers for the program.
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Maria Navarro, ACE-10, FAA Aviation Education Representative 601 East 12th Street Federal Building, Room 1501 Kansas City, MO 64106 (816) 426-3046 / Fax: (816) 426-3091

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Dr. Brent Bowen, Director Aviation Education Resource Center University of Nebraska Aviation Institute 60th and Dodge Omaha, NE 68182-0508 (402) 554-3424

Val J. Hruska, Aviation Specialist Aviation Education Resource Center Nebraska Department of Aeronautics PO Box 82088 Lincoln, NE 68501-2088 (402) 471-2371

## ► Environmental Protection Agency (EPA)

### **EPA** Regional Office

This office takes part in a variety of environmental education programs for both teachers and students. Programs range from teacher workshops and student contests to in-school presentations. Information on environmental issues is also available through the Public Information Center located at the office.

Rowena Michaels, Environmental Education Coordinator Environmental Protection Agency 726 Minnesota Avenue Kansas City, KS 66101 (913) 551-7003 / Fax: (913) 551-7066

## The President's Environmental Youth Awards (PEYA) Program

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EPA Region 7 726 Minnesota Avenue Kansas City, KS 66101 (913) 551-7003 / Fax: (913) 551-7066

# ► National Aeronautics and Space Administration (NASA)

#### **NASA Educator Resource Center**

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NASA Johnson Space Center Educator Resource Center Mail Code AP-2 2101 NASA Road One Houston, TX 77058-3696 (713) 483-8696

#### **NASA** Field Centers

Each field center has an educational programs officer who is responsible for precollege education programs. In addition to administering National programs, the center offers programs and services to meet regional and local needs.

Dr. Robert W. Fitzmaurice, Center Education Programs Officer Public Affairs Office AP2 NASA Johnson Space Center 2101 NASA Road One Houston, TX 77058-3696 (713) 483-1257

### NASA Regional Educator Resource Center (RERC)

To offer more educators the opportunity to visit the Educator Resource Center Network (ERCN), NASA forms partnerships with planetariums, universities, museums, and other nonprofit organizations to serve as RERCs. Teachers may preview or copy NASA materials upon request.

University of Nebraska at Omaha Mallory Kountze Planetarium Durham Science Center, Room 144 60th and Dodge Streets Omaha, NE 68182-0266 (402) 554-2510

University of Nebraska State Museum NASA Regional Educator Resource Center 14th and U Streets, 307 Morrill Hall Lincoln, NE 68588-0338 (402) 472-6302

### **Space Grant Consortium**

The Space Grant Consortium in each State consists of colleges, universities, industry, and other organizations that have an interest in aeronautics and space education. Each consortium receives NASA funds for use in implementing a balanced program of research, education, and public service.

Nebraska Space Grant Consortium Aviation Institute Allwine Hall 422 University of Nebraska at Omaha Omaha, NE 68182-0508 (402) 554-3424



## ► National Science Foundation (NSF)

## Statewide Systemic Initiatives (SSI) Program

Nebraska's SSI Program focuses on mathematics education. Progress includes the establishment of partnerships among school districts; curriculum enrichment; and the incorporation of technology into the classroom, including televised mathematics programs and an electronic computer network.

W. James Lewis or Sandra K. Scofield Nebraska Mathematics and Science Initiative PO Box 880231 Lincoln, NE 68588-0231 (402) 472-8965 Fax: (402) 472-8466 or 9377

### North Dakota

### ▶ Department of Agriculture (USDA)

#### 4-H State Leader

The State 4-H Youth Development Programs are administered by the Cooperative Extension Service at land-grant universities. State 4-H leaders coordinate outreach services and training to all county offices.

Dr. Jeffrey Miller, Program Leader 4-H Youth Development North Dakota State University 219 FLC, PO Box 5016 Fargo, ND 58105 (701) 237-7259 / Fax: (701) 231-8568 E-mail: hmec4h@ndsuext.nodak.edu

### Ag in the Classroom State Leader

This program promotes increased understanding of agriculture and possible careers in the agricultural sciences. With National leadership provided by USDA, each State manages its own programs, with assistance from agribusiness, educational institutions, and government.

Sarah Nordby North Dakota Department of Agriculture HCI, Box 9 Aridon, ND 58620 (701) 224-4757 / Fax: (701) 224-4567

### ▶ Department of Education (ED)

### Eisenhower High Plains Consortium for Mathematics and Science

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John Sutton, Director
Eisenhower High Plains Consortium for
Mathematics and Science
2550 South Parker Road, Suite 500
Aurora, CO 80014
(800) 949-6387
(303) 337-0990 / Fax: (303) 337-3005
E-mail: jsutton@mcrel.org
WWW: http://www.mcrel.org/hpc

### **Eisenhower State Coordinators**

Eisenhower State Coordinators administer the Eisenhower Professional Development Program State Formula grants. The program focuses on sustained and intensive high-quality professional development through inservice programs.

Ron Torgeson
Eisenhower Professional Development
Program
North Dakota Department of Public
Instruction
Capitol Building, 600 East Boulevard Avenue
Bismarck, ND 58505-0440
(701) 328-2270 / Fax: (701) 328-4770

### Eisenhower State Coordinators for Higher Education

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Eisenhower Professional Development
Program
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Capitol Building, 600 East Boulevard Avenue
Bismarck, ND 58505-0440
(701) 328-2270 / Fax: (701) 328-4770

## Mid-continent Regional Educational Laboratory (McREL)

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Tim Waters, Executive Director Mid-continent Regional Educational Laboratory 2550 South Parker Road, Suite 500 Aurora, CO 80014 (800) 949-6387 (303) 337-0990 / Fax: (303) 337-3005

### North Central Regional Technology in Education Consortium (NCR\*TEC)

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Randy Knuth, Director NCR\*TEC North Central Regional Educational Laboratory 1900 North Spring Road, Suite 300 Oak Brook, IL 60521-1480 (630) 571-4710 / Fax: (630) 218-4989 E-mail: rknuth@ncrel.org WWW: http://www.ncrtec.org/

Catherine Mozer Conner, R\*TEC Program Officer
U.S. Department of Education
Office of Educational Research and Improvement
ORAD/SLSD, Room 506a
555 New Jersey Avenue NW
Washington, DC 20208-5644
(202) 219-8070
E-mail: cconnor@inet.ed.gov

### ▶ Department of Energy (DOE)

### Western Area Power Administration (WAPA), Bismarck District Office

This office participates in the Federal junior fellowship program and coordinates a Regional Science Bowl Competition.

Bruce Frolich Western Area Power Administration PO Box 1173 Bismarck, ND 58502-1173 (701) 221-4507 / Fax: (701) 221-4526



## ► Department of the Interior (DOI)

### **Audubon National Wildlife Refuge**

The refuge conducts the Annual Bird Box/Feeder Workshop for elementary students. 4-H groups, Boy and Girl Scouts, and interested individuals learn about and construct bluebird houses and bird feeders. Students take home what they build at the end of the session. Construction materials are donated by local lumber companies and grain elevators.

Peter T. Smith, Assistant Project Leader Audubon National Wildlife Refuge RR1, Box 16 Coleharbor, ND 58531 (701) 442-5474 / Fax: (701) 442-5546

## Arrowwood National Wildlife Refuge

Environmental Education Programs are tailored to the needs and/or curricula of requesting organizations. Groups consist of local classrooms of all ages, scout groups, 4-H, and other clubs. Onsite activities relate to refuge operations, mission, management, and general environmental topics. Local Project WILD facilitators are often used in addition to refuge staff.

Mark Vaniman, Refuge Manager Arrowwood NWR 7745 11th Street, SE Pingree, ND 58476 (701) 285-3341 / Fax: (701) 285-3350

## Bureau of Land Management State Office

This office provides information about educational programs, materials, and local land-management issues.

Education Coordinator Bureau of Land Management PO Box 36800 222 North 32nd Street Billings, MT 59107 (406) 255-2827

#### Des Lacs National Wildlife Refuge

As part of its education program, the refuge has developed An Educator's Guide to Great Plains Fire Ecology, a publication that enables educators to make presentations about the role of fire in grassland ecology.

Michael D. Blenden, Project Leader Des Lacs National Wildlife Refuge Box 578 Kenmare, ND 58746 (701) 385-4046 / Fax: (701) 385-3214

### Devils Lake Wetlands Management District

Students Educated about Ecosystems is a program in which school-aged students receive instruction on the interrelationships of life forms on the refuge.

Roger Hollevoet, Project Leader Devils Lake Wetlands Management District PO Box 908 Devils Lake, ND 58301 (701) 662-8611 / Fax: (701) 662-8612

## J. Clark Salyer National Wildlife Refuge

Programs and tours are developed and conducted according to the needs of the specific groups that visit the refuge.

Gary Erickson, Supervisory Refuge Operation Specialist J. Clark Salyer NWR PO Box 66 Upham, ND 58789 (701) 768-2548 / Fax: (701) 768-2834

## Long Lake National Wildlife Refuge

Project WILD/Project WET Workshops are given to State educators for incorporating science, wildlife, and water education into existing curriculum.

Paul C. Van Ningen, Project Leader Long Lake NWR Complex 12000 353 Street SE Moffit, ND 58560 (701) 387-4397 / Fax: (701) 387-4767

## Project Water Education for Teachers (WET)

Project WET is an interdisciplinary water education program intended to supplement a school's existing curriculum. Classroom-ready teaching aides being developed include activity guides and modules for grades K-12, computer simulations, water-history publications, groundwater flow models, and a series of children's story and action books.

Bill Sharff State Water Commission 900 East Boulevard Bismarck, ND 58505 (701) 224-4833

### **Project WILD**

Project WILD offers teacher training and educational materials. Teacher guides, free to teachers who attend the training session, contain more than 80 supplementary, interdisciplinary activities for grades K–12.

Dave Jensen, Project WILD Coordinator North Dakota Game and Fish 100 North Bismarck Expressway Bismarck, ND 58501-5095 (701) 221-6322 / Fax: (701) 221-6352

## Tewaukon National Wildlife Refuge

The Refuge Management for Prairie Wildlife program uses the refuge as a classroom to introduce visitors to the National Wildlife Refuge System and the variety of wildlife management practices being used to manipulate habitat for the benefit of migratory birds and resident wildlife. The refuge also offers a National Wildlife Week program consisting of materials and in-school visits by refuge staff who discuss the natural resources topic selected by the Wildlife Federation.

Jack Lalor, Refuge Operations Specialist Tewaukon National Wildlife Refuge 9754 143 1/2 Avenue, SE Cayuga, ND 58013 (701) 724-3598 / Fax: (701) 724-3683

### Theodore Roosevelt National Park

Programs at the park include guided nature walks and activities that focus primarily on environmental education and park ecology.

Division of Interpretation Theodore Roosevelt National Park Box 7 Medora, ND 58645 (701) 623-4466

### U.S. Fish and Wildlife Service

Endangered Species Tub Program is designed for teachers and other educators working with grades K-12. The purpose is to increase awareness and appreciation for endangered species. Materials in the tub include games, videos, puzzles, computer disks, wolf hide, preserved pallid sturgeon, and posters.

Prairie Wetlands Education Trunk Program provides trunks containing a variety of handson, interactive materials for use by teachers and other educators working with grades K–12. The purpose is to build awareness and understanding of the importance of wetlands. Materials include puppets and scripts, an amphibian trivia game, a wetland animal track match activity, puzzles, videos, and a teacher guide.

Kathy Martin, Botanist Karen Kreil, Fish and Wildlife Biologist USFWS Ecological Services 1500 East Capitol Avenue Bismarck, ND 58501 (701) 250-4401 / Fax: (701) 250-4400



### **▶Department of Labor** (DOL)

### Job Training Partnership Act (ITPA) Liaison

The JTPA Liaison can provide information about the Job Training Partnership Act State and local programs for economically disadvantaged adults and youth.

Gerald P. Balzer, Executive Director North Dakota Office of Job Service 1000 East Divide Avenue, PO Box 1537 Bismarck, ND 58502-1537 (701) 224-2836 / Fax: (701) 224-4000

### **▶**Department of **Transportation (DOT)**

### **Federal Aviation Administration** (FAA) Aviation Education

The FAA Aviation Education Representative coordinates aviation education services, including materials and programs for the FAA in the States assigned to the region.

Programs include the following:

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- Aviation Education Workshops for Teachers provide teachers with information on FAA aviation programs and materials and prepare them to teach aviation in the classroom. Annual workshops are conducted at colleges and universities across the Nation. The FAA provides information, materials, and speakers for the pro-
- National Congress on Aviation and Space Education is sponsored annually by the FAA in partnership with the National Aeronautics and Space Administration and the Civil Air Patrol. The meeting includes teacher workshops and crosstalk sessions to exchange ideas on promoting aerospace education.

Lee Carlson, AGL-11, FAA Aviation Education Representative O'Hare Lake Officer Center 2300 East Devon Avenue Des Plaines, IL 60018 (708) 294-7042 / Fax: (708) 294-7368

### **FAA Aviation Education Resource** Centers

Located at colleges, museums, and State aviation authority offices, these centers function as information distribution centers for Federal Aviation Administration education materials and resources. The resource centers maintain and provide quantities of printed materials, videotapes, and computer educational software. Center personnel can also provide general information, conduct workshops, and make aviation-related presenta-

Charles L. Robertson, Assistant Professor Aviation Education Resource Center University of North Dakota Department of Aviation Box 8216, University Station Grand Forks, ND 58202-8216 (701) 777-2791

### **▶** Environmental Protection Agency (EPA)

### **EPA Regional Office**

This office takes part in a variety of environmental education programs for both teachers and students. Programs range from teacher workshops and student contests to in-school presentations. Information on environmental issues is also available through the Public Information Center located at the office.

Cece Forget, Environmental Education Coordinator **Environmental Protection Agency** One Denver Place (OCPI) 999 18th Street, Suite 500 Denver, CO 80202-2405 (303) 312-6605 / Fax: (303) 312-6961

### The President's Environmental Youth Awards (PEYA) Program

Young people from each State are invited to participate in PEYA, a Nationwide program designed to encourage individuals, school classes, summer camps, public interest groups, and youth organizations to promote environmental awareness and community involvement. The two components of the program are the regional certificate program and the National awards competition. Regional certificates, signed by the President, are awarded to each participant by EPA Regional Offices. National individual project winners,

or one representative from a National awardwinning group project, along with one sponsor, are honored at EPA headquarters in Washington, DC. Interested K-12 individuals or groups may obtain application materials and contest rules by contacting the EPA Regional Office that serves their State. PEYA has been an ongoing project since it was created by the White House Office of Education and the EPA in 1971.

EPA Region 8 999 18th Street Denver, CO 80202-2466 (303) 312-6605 / Fax: (303) 312-6961

### ▶ National Aeronautics and **Space Administration** (NASA)

#### **NASA Educator Resource Center**

The Center has NASA-related educational materials in various formats, including laserdiscs, CD-ROMs, videotapes, slides, audiotapes, publications, and teacher guides. Teachers may preview or copy NASA materials upon request.

NASA Johnson Space Center Educator Resource Center Mail Code AP-2 2101 NASA Road One Houston, TX 77058-3696 (713) 483-8696

### **NASA Field Centers**

Each field center has an educational programs officer who is responsible for precollege education programs. In addition to administering National programs, the center offers programs and services to meet regional and local needs.

Dr. Robert W. Fitzmaurice, Center Education Programs Officer Public Affairs Office AP2 NASA Johnson Space Center 2101 NASA Road One Houston, TX 77058-3696 (713) 483-1257

### **NASA** Regional Educator Resource Centers (RERC)

To offer more educators the opportunity to visit the Educator Resource Center Network (ERCN), NASA forms partnerships with planetariums, universities, museums, and other nonprofit organizations to serve as RERCs. Teachers may preview or copy NASA materials upon request.



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University of North Dakota NASA Regional Educator Resource Center The Wayne Peterson Room Clifford Hall—5th Floor Space Studies Department PO Box 9008, University Station Grand Forks, ND 58202-9008 (701) 777-4856 / (800) 828-4274

### **Space Grant Consortium**

The Space Grant Consortium in each State consists of colleges, universities, industry, and other organizations that have an interest in aeronautics and space education. Each consortium receives NASA funds for use in implementing a balanced program of research, education, and public service.

North Dakota Space Grant Consortium University of North Dakota Department of Space Studies, Box 9008 Grand Forks, ND 58202 (701) 777-3167

### South Dakota

### ▶ Department of Agriculture (USDA)

### 4-H State Leader

The State 4-H Youth Development Programs are administered by the Cooperative Extension Service at land-grant universities. State 4-H leaders coordinate outreach services and training to all county offices.

John Burton, 4-H Interim Program Leader South Dakota State University 4-H Club Box 2207E, Ag Hall 104 Brookings, SD 57007 (605) 688-4167 / Fax: (605) 688-4939 E-mail: jb4h@sdsumus.sdstate.edu

#### Ag in the Classroom State Leader

This program promotes increased understanding of agriculture and possible careers in the agricultural sciences. With National leadership provided by USDA, each State manages its own programs, with assistance from agribusiness, educational institutions, and government.

Melanie Schumacher, President South Dakota Ag in the Classroom PO Box 577 Pierre, SD 57501 (605) 945-2306

## ► Department of Defense (DoD)

### South Dakota Air and Space Museum

The evolution of aviation and the progression of technology involved in aviation are the primary aspects of this museum. Tours are available upon request.

South Dakota Air and Space Museum 28 BW/CVM Ellsworth Air Force Base, SD 57706-5000 (605) 385-5188

### ▶ Department of Education (ED)

### Eisenhower High Plains Consortium for Mathematics and Science

The Eisenhower Regional Consortium provides information and technical assistance to help States and school districts improve mathematics and science education.

John Sutton, Director
Eisenhower High Plains Consortium for
Mathematics and Science
2550 South Parker Road, Suite 500
Aurora, CO 80014
(800) 949-6387
(303) 337-0990 / Fax: (303) 337-3005
E-mail: jsutton@mcrel.org
WWW: http://www.mcrel.org/hpc

### **Eisenhower State Coordinators**

Eisenhower State Coordinators administer the Eisenhower Professional Development Program State Formula grants. The program focuses on sustained and intensive high-quality professional development through inservice programs.

Jim Hauck
Eisenhower Professional Development
Program
South Dakota Division of Education
700 Governors Drive
Pierre, SD 57501-2291
(605) 773-4712 / Fax: (605) 773-6139

## Eisenhower State Coordinators for Higher Education

Eisenhower State Coordinators oversee the Eisenhower Professional Development State Formula Grants for the State Agency for Higher Education (SAHE). The program focuses on teacher enhancement through both inservice and preservice programs.

Paul Gough Board of Regents 207 East Capitol Pierre, SD 57501 (605) 773-3455 / Fax: (605) 773-5320

### Mid-continent Regional Educational Laboratory (McREL)

The Regional Educational Laboratory identifies effective teaching techniques and school improvement efforts within the region and shares this information with State and local educators.

Tim Waters, Executive Director Mid-continent Regional Educational Laboratory 2550 South Parker Road, Suite 500 Aurora, CO 80014 (800) 949-6387 (303) 337-0990 / Fax: (303) 337-3005

### North Central Regional Technology in Education Consortium (NCR\*TEC)

ED established the Regional Technology in Education (R\*TEC) program in the fall of 1995 to help States, districts, schools, adult literacy centers, and other educational institutions use advanced technology to support improved teaching and student achievement. R\*TEC's role in educational technology is unique in two ways: the emphasis is regional and the primary goal is to ensure that technology is used effectively to support school reform. Program strategies include professional development, technical assistance, and information dissemination.

Randy Knuth, Director NCR\*TEC North Central Regional Educational Laboratory 1900 North Spring Road, Suite 300 Oak Brook, IL 60521-1480 (630) 571-4710 / Fax: (630) 218-4989 E-mail: rknuth@ncrel.org WWW: http://www.ncrtec.org/

Catherine Mozer Conner, R\*TEC Program Officer
U.S. Department of Education
Office of Educational Research and
Improvement
ORAD/SLSD, Room 506a
555 New Jersey Avenue NW
Washington, DC 20208-5644
(202) 219-8070
E-mail: cconnor@inet.ed.gov

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## ► Department of Energy (DOE)

### Western Area Power Administration (WAPA)

WAPA conducts the Regional Science Bowl, an academic competition sponsored by DOE and the community. Held each February, it encourages the study of science and mathematics and the pursuit of related careers. The regional winner advances to the National Competition, held each spring in Washington, DC.

Greg Vaselaar Western Area Power Administration—Huron 200 4th Street SW Huron, SD 57350-2474 (605) 353-9209 / Fax: (605) 353-9254

## ► Department of the Interior (DOI)

#### **Badlands National Park**

The park offers guided nature walks and a teacher's guide that emphasizes the geology, history, ecology, and zoology of the Badlands.

Division of Interpretation Badlands National Park PO Box 6 Interior, SD 57750 (605) 433-5361

### **Bureau of Land Management State Office**

This office provides information about educational programs, materials, and local land-management issues.

Education Coordinator Bureau of Land Management PO Box 36800 222 North 32nd Street Billings, MT 59107 (406) 255-2827

### Earth Science Information Center, Sioux Falls

This center offers information and sales service for U.S. Geological Survey map products and Earth science publications.

Sioux Falls Earth Science Information Center EROS Data Center Sioux Falls, SD 57138-1177 (605) 594-6151

## Gavins Point National Fish Hatchery and Aquarium

The hatchery/aquarium works with school districts, church groups, scout troops, senior citizens, and home school groups in South Dakota, Iowa, and Nebraska to provide an Outreach Program. Education opportunities are available in the areas of fishery biology, environmental education and awareness, watchable wildlife, aquatic science, and ecology. This program provides in-school and outdoor classroom learning opportunities.

Herb Bollig, Project Leader Gavins Point National Fish Hatchery and Aquarium RR 1, Box 293 Yankton, SD 57078 (605) 665-3352 / Fax: (605) 665-3360

### **Jewel Cave National Monument**

Programs include guided nature walks and lectures that emphasize the geology of the monument.

Division of Interpretation Jewel Cave National Monument Box 60AA, RR1 Custer, SD 57730 (605) 673-2288

### **Project WILD**

Project WILD offers teacher training and educational materials. Teacher guides, free to teachers who attend the training session, contain more than 80 supplementary, interdisciplinary activities for grades K–12.

Steve Kirsch, Project WILD Coordinator South Dakota Department of Game, Fish, and Parks 523 East Capitol Pierre, SD 57501 (605) 773-5511 / Fax: (605) 773-6245

## Reservoir and River Management: Taming South Dakota's Rivers

Volunteers visit water festivals and schools to show a video about reservoirs in South Dakota and to discuss water resource development.

Curt Anderson, Civil Engineer Newell Field Office, N-434 PO Box 226 Newell, SD 57760 (605) 456-2695 / Fax: (605) 456-2153

### Waubay National Wildlife Refuge

Glacial Lakes Outdoor School provides an opportunity to study and appreciate the interrelationships between people and the natural world. Study sites include ponds, disturbed

or restored prairie, woodlands, and glacial lakes at Waubay National Wildlife Refuge outdoor classroom study sites.

In the School Groups Programs, staff provide guided tours and talks, as requested, to various students visiting the refuge on field trips. Talks include refuge natural history, bird life, wildlife, and vegetation.

Doug Leschisin, Refuge Operations Specialist Waubay NWR RR 1 Box 39 Waubay, SD 57273 (605) 947-4521 / Fax: (605) 947-4524

#### Wind Cave National Park

The park offers Connections, an environmental education program for first through eighth graders. The onsite, day-long experience is designed to allow students and teachers to explore relationships between the mixed grass prairie, the ponderosa pine forest, the cave, and the plants and animals that live in these habitats. The concept-based curriculum encourages critical thinking and cooperative learning.

Ron Terry, Chief Interpreter Wind Cave National Park RR1, Box 190 WCNP Hot Springs, SD 57747 (605) 745-4600 / Fax: (605) 745-4207

## ► Department of Labor (DOL)

## Job Training Partnership Act (JTPA) Liaison

The JTPA Liaison can provide information about the Job Training Partnership Act State and local programs for economically disadvantaged adults and youth.

Grant Gromley, Secretary South Dakota Department of Labor Kneip Building, 700 Governors Drive Pierre, SD 57501-2277 (605) 773-3101 / Fax: (605) 773-4211

## ► Department of Transportation (DOT)

## Federal Aviation Administration (FAA) Aviation Education

The FAA Aviation Education Representative coordinates aviation education services,



including materials and programs for the FAA in the States assigned to the region.

Programs include the following:

- ▶ The Aviation Career Education (ACE)
  Academy is a one-week summer aviation
  education program for high school students sponsored by the FAA along with a
  host educational institution. The program
  provides students with diverse experiences
  in aviation career exploration. The focus
  is on aviation career clusters identified by
  FAA, with an emphasis on opportunities
  for women and minorities. A goal is to
  have one program in each State and U.S.
  Territory. The FAA will conduct regional
  leadership workshops and provide funds
  based on the availability of resources.
- ▶ Aviation Education Workshops for Teachers provide teachers with information on FAA aviation programs and materials and prepare them to teach aviation in the classroom. Annual workshops are conducted at colleges and universities across the Nation. The FAA provides information, materials, and speakers for the program.
- ▶ National Congress on Aviation and Space Education is sponsored annually by the FAA in partnership with the National Aeronautics and Space Administration and the Civil Air Patrol. The meeting includes teacher workshops and crosstalk sessions to exchange ideas on promoting aerospace education.

Lee Carlson, AGL-11, FAA Aviation Education Representative O'Hare Lake Officer Center 2300 East Devon Avenue Des Plaines, IL 60018 (708) 294-7042 or 7691 Fax: (708) 294-7368

### FAA Aviation Education Resource Centers

Located at colleges, museums, and State aviation authority offices, these centers function as information distribution centers for Federal Aviation Administration education materials and resources. The resource centers maintain and provide quantities of printed materials, videotapes, and computer educational software. Center personnel can also provide general information, conduct workshops, and make aviation-related presentations.

Chip Harris, Director Aviation Education Resource Center Sisseton Wahpeton Community College Office of Planning and Development Old Agency Box 689 Sisseton, SD 57262-0689 (605) 698-3966

## ► Environmental Protection Agency (EPA)

### **EPA** Regional Office

This office takes part in a variety of environmental education programs for both teachers and students. Programs range from teacher workshops and student contests to in-school presentations. Information on environmental issues is also available through the Public Information Center located at the office.

Cece Forget, Environmental Education Coordinator Environmental Protection Agency One Denver Place (OCPI) 999 18th Street, Suite 500 Denver, CO 80202-2405 (303) 312-6605 / Fax: (303) 312-6961

## The President's Environmental Youth Awards (PEYA) Program

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EPA Region 8 999 18th Street Denver, CO 80202-2466 (303) 312-6605 / Fax: (303) 312-6961

# ► National Aeronautics and Space Administration (NASA)

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#### **NASA Field Centers**

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Dr. Robert W. Fitzmaurice, Center Education Programs Officer Public Affairs Office AP2 NASA Johnson Space Center 2101 NASA Road One Houston, TX 77058-3696 (713) 483-1257

### NASA Regional Educator Resource Center (RERC)

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NASA Regional Educator Resource Center T.I.E. Office 1925 Plaza Boulevard Rapid City, SD 57702 (605) 394-1876

### Space Grant Consortium

The Space Grant Consortium in each State consists of colleges, universities, industry, and other organizations that have an interest in aeronautics and space education. Each consortium receives NASA funds for use in implementing a balanced program of research, education, and public service.

South Dakota Space Grant Consortium Institute of Atmospheric Sciences South Dakota School of Mines and Technology 501 East St. Joseph Street Rapid City, SD 57701-3995 (605) 394-1975



### **Wyoming**

### ▶ Department of Agriculture (USDA)

#### 4-H State Leader

The State 4-H Youth Development Programs are administered by the Cooperative Extension Service at land-grant universities. State 4-H leaders coordinate outreach services and training to all county offices.

Betty Holmes, Assistant Director College of Agriculture University of Wyoming PO Box 3354 Laramie, WY 82071 (307) 766-5663 / Fax: (307) 766-3379 E-mail: state.4h.office@agmail.uwyo.edu

### Ag in the Classroom State Leader

This program promotes increased understanding of agriculture and possible careers in the agricultural sciences. With National leadership provided by USDA, each State manages its own programs, with assistance from agribusiness, educational institutions, and government.

Elaine Moore Wyoming Ag in the Classroom Wyoming Department of Agriculture 2407 Highland Court Douglas, WY 82633 (307) 358-6232

Lori Grass, President Wyoming Ag in the Classroom 2219 Carey Avenue Cheyenne, WY 82002 (307) 322-5727

## ► Department of Education (ED)

## Eisenhower High Plains Consortium for Mathematics and Science

The Eisenhower Regional Consortium provides information and technical assistance to help States and school districts improve mathematics and science education.

John Sutton, Director Eisenhower High Plains Consortium for Mathematics and Science 2550 South Parker Road, Suite 500 Aurora, CO 80014 (800) 949-6387 (303) 337-0990 / Fax: (303) 337-3005

E-mail: jsutton@mcrel.org

WWW: http://www.mcrel.org/hpc

#### Eisenhower State Coordinators

Eisenhower State Coordinators administer the Eisenhower Professional Development Program State Formula grants. The program focuses on sustained and intensive high-quality professional development through inservice programs.

Judy Kishman
Eisenhower Professional Development
Program
Wyoming Department of Education
241 Hathaway Building
Cheyenne, WY 82002-0050
(307) 777-6247 / Fax: (307) 777-6234

## **Eisenhower State Coordinators** for Higher Education

Eisenhower State Coordinators oversee the Eisenhower Professional Development State Formula Grants for the State Agency for Higher Education (SAHE). The program focuses on teacher enhancement through both inservice and preservice programs.

Judy Kishman
Eisenhower Professional Development
Program
Wyoming Department of Education
241 Hathaway Building
Cheyenne, WY 82002-0050
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## Mid-continent Regional Educational Laboratory (McREL)

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Tim Waters, Executive Director Mid-continent Regional Educational Laboratory 2550 South Parker Road, Suite 500 Aurora, CO 80014 (800) 949-6387 (303) 337-0990 / Fax: (303) 337-3005

## Northwest Educational Technology Consortium (NETC)

ED established the Regional Technology in Education (R\*TEC) program in the fall of 1995 to help States, districts, schools, adult literacy centers, and other educational institu-

tions use advanced technology to support improved teaching and student achievement. R\*TEC's role in educational technology is unique in two ways: the emphasis is regional and the primary goal is to ensure that technology is used effectively to support school reform. Program strategies include professional development, technical assistance, and information dissemination.

Seymour Hanfling, Director, NETC Northwest Regional Educational Laboratory 101 SW Main Street, Suite 500 Portland, OR 97204-3297 (503) 275-9500 / Fax: (503) 275-9584 E-mail: hanflins@nwrel.org WWW: http://www.netc.org/

Gerald Malitz, R\*TEC Project Officer U.S. Department of Education Office of Educational Research and Improvement NCES, Room 410c 555 New Jersey Avenue NW Washington, DC 20208-5651 (202) 219-1364 E-mail: gmalitz@inet.ed.gov

### ▶ Department of the Interior (DOI)

## Bighorn Canyon National Recreation Area

Programs at this recreation area, including guided walks and teacher guides, focus primarily on the ecology of Bighorn Canyon.

Division of Interpretation Bighorn Canyon National Recreation Area PO Box 458 Fort Smith, MT 59035 (406) 666-2412

### **Bureau of Land Management State Office**

This office provides information about educational programs, materials, and local land-management issues.

Education Coordinator Bureau of Land Management PO Box 1828, 2515 Warren Avenue Cheyenne, WY 82003 (307) 775-6001

#### **Devils Tower National Monument**

This monument offers guided walks and teacher guides that focus primarily on environmental education and the geology of Devils Tower.



Division of Interpretation Devils Tower National Monument Devils Tower, WY 82714 (307) 467-5283

### National Elk Refuge

With the use of pre-visit study materials, students of all ages will be introduced to elk and other wildlife of the refuge. This, in combination with a horse-drawn sleigh ride into the refuge, slide show, video, hands-on exhibits, and a talk with an interpreter, gives the students a memorable outdoor classroom experience. The refuge is affiliated with the National Wildlife Art Museum, which has 12 galleries of spectacular wildlife art and associated environmental education.

James Griffin, Assistant Refuge Manager Education and Visitor Services National Elk Refuge PO Box C 675 East Broadway Jackson, WY 83001 (307) 733-9212 / Fax: (307) 733-9729

#### Fossil Butte National Monument

Teaching Paleontology in the National Parks, Monuments, and Public Lands is a curriculum guide designed to be used by second and third grade teachers when presenting principles of fossils as clues to past life. The guide is accompanied by a traveling kit that includes casts of fossils, slide programs that introduce fossils, environments, adaptations, and an interactive computer program on population dynamics. The curriculum includes four units. For second graders there is a unit on fossilization and human influences; for third graders, there are units on adaptation, community, and human influences. Fifteen kits are available for loan.

Monument staff also offer a Junior Ranger Program. To become a Junior Ranger, children need only have a desire to learn and a sense of wonder. By talking with a ranger, hiking a trail, touring the exhibits, and helping to prepare a fossil, children will earn a Junior Ranger badge and their name will be entered in our permanent register. Parents are encouraged to follow along.

Marcia D. Fagnant, Park Ranger Fossil Butte National Monument PO Box 592 Kemmerer, WY 83101 (307) 877-4455 / Fax: (307) 877-4456

### **Grand Teton National Park**

Teton Science School is a year-round residential program for students of all ages. It addresses natural and physical science experimental education. Information, curricula, scheduling, and prices are all available from the school.

William W. Swift, Chief of Interpretation Grand Teton National Park PO Drawer 170

Moose, WY 83012 (307) 739-3390 / Fax: (307) 739-3438

### Project WILD

Project WILD offers teacher training and educational materials. Teacher guides, free to teachers who attend the training session, contain more than 80 supplementary, interdisciplinary activities for grades K–12.

Joe Vogier, Project WILD Coordinator Wyoming Game and Fish Department 5400 Bishop Boulevard Cheyenne, WY 82002 (307) 777-4538 / Fax: (307) 777-4610

### Wyoming Conservation Connection

Natural Science Workshops for Teachers, a professional development program, is a component of the University of Wyoming's Conservation Connection. This cooperative effort between University personnel and land management and wildlife resource agency personnel provides distinctive learning experiences at regionally located sites around Wyoming. The teachers' exposure to Wyoming's spectacular natural resources—such as mountains, forests, unique geology, pristine streams, and native wildlife and vegetation—promotes the hands-on experience necessary for a good environmental and natural resource education.

Dr. Duane Keown Wyoming Conservation Connection Box 3992 Laramie, WY 82071 (307) 766-6381

## Wyoming Bureau of Land Management

Archaeology Week consists of various Statewide activities, including a speaker's bureau, archaeology fairs, reenactments, contests, tours, and school-sponsored field trips and other activities. All activities promote archaeology.

Ranel Stephenson Capron, Archaeologist Bureau of Land Management 5353 Yellowstone Road Cheyenne, Wyoming 82009 (307) 775-6108 / Fax: (307) 775-6082

## Wyoming Resource Education Days (WyRED)

Sponsored by the Wyoming Section of the Society for Range Management and various Conservation Districts around Wyoming, this program provides practical experience in rangeland management, plant identification,

and range judging contests. Subjects covered at WyRED include geology, soils, plant growth, the parts and identifying characteristics of plants, range sites, range utilization, wildlife, water and riparian areas, applied and management practices for range management, reclamation, and many other topics. A range judging contest is held on the last day.

Don Glenn, Range Conservationist 5353 Yellowstone Road Cheyenne, WY 82009 (307) 775-6097 / Fax: (307) 775-6082

#### Yellowstone National Park

Expedition: Yellowstone! is a 234-page curriculum for grades four through six. Its goal is to acquaint students, teachers, and parents with the Great Yellowstone Ecosystem. A residential program with a National Park Ranger faculty is offered to school groups in the spring and fall. Whether the curriculum is used in the park or in the classroom, students experience hands-on activities in the out-ofdoors and develop an ethic that promotes life-long stewardship of the park, as well as of regional and global resources. The program offers teachers of grades four through six free use of park facilities, free accommodations, and services of a park ranger during the spring and fall for environmental education field trips. Teachers are required to register for the program and purchase curriculum materials. Due to the high number of requests, a lottery process determines which teachers can participate

Ellen Petrick-Underwood, Environmental Education Specialist National Park Service PO Box 168 Yellowstone National Park, WY 82190 (307) 344-2253 or 344-7381 Fax: (307) 344-2323

## ► Department of Labor (DOL)

## Job Training Partnership Act (JTPA) Liaison

The JTPA Liaison can provide information about the Job Training Partnership Act State and local programs for economically disadvantaged adults and youth.

Matthew K. Johnson, Deputy Job Training Administrator Division of Employment Services Job Training Programs PO Box 2760 Casper, WY 82602 (307) 235-3611 / Fax: (307) 235-3293



### ► Department of Transportation (DOT)

## Federal Aviation Administration (FAA) Aviation Education

The FAA Aviation Education Representative coordinates aviation education services, including materials and programs for the FAA in the States assigned to the region.

Programs include the following:

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  Academy is a one-week summer aviation
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- ► National Congress on Aviation and Space Education is sponsored annually by the FAA in partnership with the National Aeronautics and Space Administration and the Civil Air Patrol. The meeting includes teacher workshops and crosstalk sessions to exchange ideas on promoting aerospace education.

Herman Payton, ANM-14A, FAA Aviation Education Representative 1601 Lind Avenue SW Renton, WA 98055-4056 (206) 227-2079 / Fax: (206) 227-1010

## ► Environmental Protection Agency (EPA)

#### **EPA** Regional Office

This office takes part in a variety of environmental education programs for both teachers and students. Programs range from teacher workshops and student contests to in-school presentations. Information on environmental issues is also available through the Public Information Center located at the office.

Cece Forget, Environmental Education Coordinator

Environmental Protection Agency One Denver Place (OCPI) 999 18th Street, Suite 500 Denver, CO 80202-2405

(303) 312-6605 / Fax: (303) 312-6961

### The President's Environmental Youth Awards (PEYA) Program

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EPA Region 8 999 18th Street Denver, CO 80202-2466 (303) 312-6605 / Fax: (303) 312-6961

# ► National Aeronautics and Space Administration (NASA)

#### **NASA Educator Resource Center**

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NASA Ames Research Center Teacher Resource Laboratory Educator Resource Center Mail Stop T12-A Moffett Field, CA 94035-1000 (415) 604-3574

### **NASA Field Centers**

Each field center has an educational programs officer who is responsible for precollege education programs. In addition to administering National programs, the center

offers programs and services to meet regional and local needs.

Garth A. Hull, Chief, Educational Programs Branch NASA Ames Research Center Mail Stop 204-12 Moffett Field, CA 94035 (415) 604-5543

### NASA Regional Educator Resource Center (RERC)

To offer more educators the opportunity to visit the Educator Resource Center Network (ERCN), NASA forms partnerships with planetariums, universities, museums, and other nonprofit organizations to serve as RERCs. Teachers may preview or copy NASA materials upon request.

University of Wyoming NASA Regional Educator Resource Center Learning Resource Center PO Box 3374 University Station Laramie, WY 82071-3374 (307) 766-2527

### **Space Grant Consortium**

The Space Grant Consortium in each State consists of colleges, universities, industry, and other organizations that have an interest in aeronautics and space education. Each consortium receives NASA funds for use in implementing a balanced program of research, education, and public service.

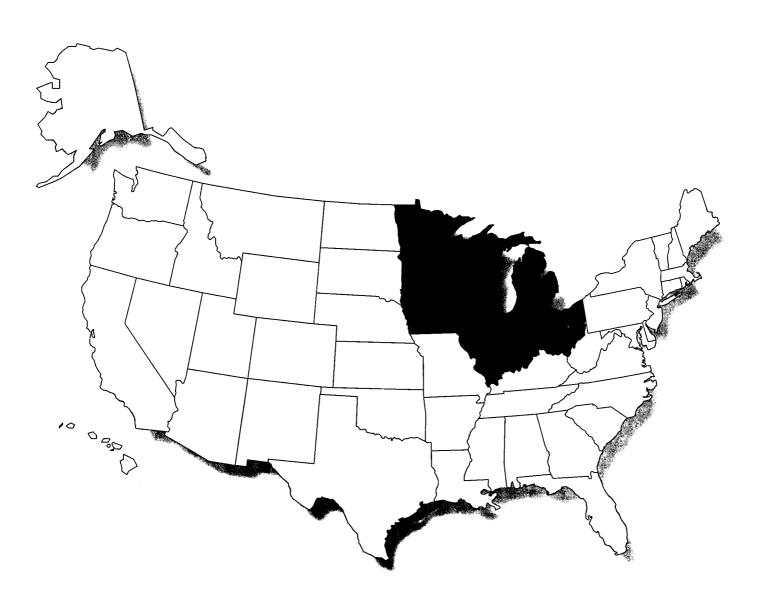
Wyoming Space Grant Consortium University of Wyoming Department of Physics and Astronomy PO Box 3905, University Station Laramie, WY 82071-3905 (307) 766-6267



- **▶** Illinois
- **▶** Indiana
- ▶ lowa
- ► Michigan
- **▶** Minnesota
- **▶** Ohio
- **▶** Wisconsin



Midwest Consortium for Mathematics and Science Education





# Midwest Consortium for Mathematics and Science Education



he Midwest Consortium for Mathematics and Science Education (MSC) provides direct technical assistance to State education agencies, intermediate State educational units, and local school districts to advance systemic reform of mathematics and science in the States of Illinois, Iowa, Indiana, Ohio, Michigan, Minnesota, and Wisconsin. Based on a student-centered learning philosophy and informed by best practice and research, technical assistance efforts are focused on helping to provide meaningful, purposeful, and engaging mathematics and science learning experiences for all students. Whenever and wherever possible, the appropriate use of technology to support and accelerate systemic reform is advocated.

#### **Beliefs**

Systemic reform of mathematics and science education is a complex challenge that must be grounded in a well-defined set of beliefs. Because the system as a whole is the challenge, the beliefs must relate not only to the nature of learners and learning, but to organization and change theory as well. Finally, the beliefs must speak to the nature of interventions that are most likely to facilitate continuous improvement of mathematics and science learning for all students.

### Beliefs About Students and Learning:

- ► All students can benefit from meaningful and active engagement in learning.
- The knowledge, skills, and understanding necessary to become lifelong learners is best acquired when students are allowed to build on prior experiences and learning.
- Because each learner presents a unique set of experience and attributes, a variety of methods and approaches will result in meaningful learning.
- ► The only constant across all learners is that when they are allowed to practice learning that is hands-on, minds-on, and authentic, they are more likely to become highly motivated and self-directed.
- ► The acquisition of knowledge, skills, and understanding is best demonstrated

through a variety of assessment practices, providing multiple opportunities to gauge the level of learning relative to well-defined expectations.

### Beliefs About the Nature of the Education Enterprise:

- ► The most significant element of the Education Enterprise is the instruction that takes place within the classroom.
- Dedicated teachers constantly seek to improve their practices and willingly adapt to change and adopt new approaches they believe to be consistent with the goal of enhanced learning for their students
- ► Effective educational leaders empower teachers to be creative and inventive in their choice of teaching practice and provide support that facilitates improved learning.
- ▶ Standards and curriculum frameworks exist to shape and guide practice and are used most effectively when education professionals are involved in their development and are given the opportunity to understand and apply them to learning for students.
- ▶ Assessment systems must exist for the primary purpose of informing instructional choice and therefore must be embedded in the learning process. Assessment must be varied in methodology, and focused on application and performance that demonstrates the acquisition of expected skills, knowledge, and understanding.
- ► Technology provides a powerful tool that can both enhance and facilitate student learning; therefore, it should be available to and used by all teachers and students.

### Beliefs About System Interventions:

- Systemic reform of education must address all elements of the instructional system.
- Systemic reform of education should have continuous improvement of student learning as a fundamental goal.

- Systemic reform efforts must empower and engage all stakeholders in the process of seeking continuous improvement of the system.
- ► Interventions that result in systemic reform must provide for long-term, follow-up support of efforts that result in improvement of instruction and learning for all students.

### Mission

The mission of the MSC is to advance systemic change in mathematics and science education through: (1) collaboration with institutions and agencies within the region; (2) direct services and technical assistance to school districts, schools, teachers, and administrators to support high priority initiatives; (3) support that will result in the development and implementation of standards, curriculum, assessment, and performance indicators that challenge students to higher levels of attainment; (4) identification and dissemination of resources, methods, materials, and practices that expand learning beyond the classroom through information education agencies and electronic media; and (5) access to networks of instructional resources and materials that will result in improved learning for all students.

### **Objectives**

MSC will continue to collaborate with partners throughout the region, including State departments of education, intermediate units, and other programs that are interested in systemic improvement of mathematics, science, and technology. MSC plans to advance the systemic reform of mathematics and science education through the accomplishment of the following six objectives:

- ► MSC will facilitate and engage in collaborative efforts with teachers, administrators, and professional organizations to achieve the outcome of systemic reform of mathematics and science education throughout the region.
- MSC will establish and implement a process to identify high impact, high priority projects, products, and services that respond to the needs of our collaborative



partners. MSC will develop relationships with two or three "intensive" sites in each State to collaboratively research and develop materials and processes that support improved student learning strategies and achievement.

- MSC will provide teachers, administrators, and other educators with training and technical assistance that will enable them to continuously improve teaching and learning in mathematics and science. Special emphasis will be placed on the use of technology.
- ► MSC will work through the National Organization Task Force on Informal Education, energy labs, museums, and other informal education entities to promote the use of informal education resources.
- MSC will work through its collaborative regional networks, other Consortia, and the Eisenhower National Clearinghouse for Mathematics and Science Education to identify and describe exemplary resources and best instructional practices.
- MSC will initiate evaluation and data collection related to intended outcomes to determine the effectiveness of Consortium activities in districts selected for intensive partnerships.

Dr. Gilbert Valdez, Director

#### Dr. Marvin Christensen,

Science and Professional Development Specialist

### Cathy Cook,

Mathematics/Science Professional Development Specialist

#### Teresa McMahon,

Evaluation and Assessment Specialist

#### Cyntha Pattison,

Mathematics and Technology Specialist

#### Mary McNabb,

Program Specialist

#### Nancy Berkas,

Program Associate

### Barbara Youngren,

Program Associate

Aggie Van Huis,

Administrative Assistant

Amy Jovanovich, Program Secretary Midwest Consortium for Mathematics and Science Education 1900 Spring Road, Suite 300 Oak Brook, IL 60521-1480

(630) 571-4700 / Fax: (630) 571-4716 WWW: http://www.ncrel.org/msc/msc.htm Al Miller and Jim Lubner University of Wisconsin Wisconsin Sea Grant 1800 University Avenue Madison, WI 53705-4094 (608) 262-0644 / Fax: (608) 263-2063

### Illinois

## ► Department of Agriculture (USDA)

#### 4-H State Leader

The State 4-H Youth Development Programs are administered by the Cooperative Extension Service at land-grant universities. State 4-H leaders coordinate outreach services and training to all county offices.

Dr. Mary Kay Munson, State 4-H Leader University of Illinois 302 East John, Suite 1901 Champaign, IL 61820 (217) 333-0910 / Fax: (217) 333-9287 E-mail: munsonm@ces4h.ag.uiuc.edu

### Ag in the Classroom State Leader

This program promotes increased understanding of agriculture and possible careers in the agricultural sciences. With National leadership provided by USDA, each State manages its own programs, with assistance from agribusiness, educational institutions, and government.

Stacy Shane Illinois Farm Bureau Field Services Division 1701 Towanda Avenue Bloomington, IL 61702-2901 (309) 557-3334 / Fax: (309) 557-2170

## **▶** Department of Commerce (DOC)

### National Sea Grant College Program, Operation Pathfinder

The program consists of two-week summer courses that present an introduction to oceanographic and coastal processes. Courses are available in six regions and are designed to enhance skills in science teaching.

## ► Department of Defense (DoD)

### Army Construction Engineering Research Laboratories

The laboratories offer high school students apprenticeship programs designed to increase scientific knowledge through hands-on experiences.

Equal Employment Opportunity Office U.S. Army Construction Engineering Research Laboratories (USACERL) PO Box 9005 Champaign, IL 61826-9005 (217) 373-7279 / (800) 872-2375

### Naval Training Center, Great Lakes

The training center participates in the Navy Community Service Program through formation of partnerships with schools and other youth organizations in Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin.

NTC Great Lakes IL Commander, Naval Training Center Code PAO Great Lakes, IL 60088-5000 (708) 688-6706

#### Rock Island Arsenal Museum

Exhibits illustrate the development of technology in weaponry production. Many historic and modern small arms are on display.

Rock Island Arsenal Museum Attention: SIORI-CFM Rock Island, IL 61299-5000 (309) 782-5021

## Science and Engineering Apprentice Program

This program, supported by DoD and administered by The George Washington University, is designed to provide research experience for high school students attending school near the participating research facility. Each student works with a senior scientist or engineer who acts as a mentor for eight weeks during the summer.



Linda Steele Army Chemical and Biological Defense Agency (CBDCOM) SCBRD-ED (RI) Rock Island Arsenal, IL 61299-7410 (309) 782-8061 or 4338

### ▶ Department of Education (ED)

#### **Eisenhower State Coordinators**

Eisenhower State Coordinators administer the Eisenhower Professional Development Program State Formula grants. The program focuses on sustained and intensive high-quality professional development through inservice programs.

Tom Alexander, Division Administrator
Grants Management and Evaluation Division
Eisenhower Professional Development
Program
Illinois State Board of Education
100 North First Street
Springfield, IL 62777-0001

(217) 782-3810 / Fax: (217) 524-6125

## Eisenhower State Coordinators for Higher Education

Eisenhower State Coordinators oversee the Eisenhower Professional Development State Formula Grants for the State Agency for Higher Education (SAHE). The program focuses on teacher enhancement through both inservice and preservice programs.

Dr. James C. Forstall, Associate Director for Academic Affairs Eisenhower Professional Development Program Illinois State Board of Higher Education 500 Reisch Building Four West Old Capitol Square Springfield, IL 62701 (217) 782-7184 / Fax: (217) 782-8548

### Midwest Consortium for Mathematics and Science Education

The Eisenhower Regional Consortium provides information and technical assistance to help States and school districts improve mathematics and science education.

Dr. Gilbert Valdez, Director Midwest Consortium for Mathematics and Science Education 1900 Spring Road, Suite 300 Oak Brook, IL 60521 (708) 571-4700 / Fax: (708) 571-4716 WWW: http://www.ncrel.org/msc/msc.htm

### North Central Regional Educational Laboratory (NCREL)

NCREL identifies effective teaching techniques and school improvement efforts within the region and shares this information with State and local educators.

Jeri Nowakowski, Executive Director NCREL 1900 Spring Road, Suite 300 Oak Brook, IL 60521 (708) 571-4700 / Fax: (708) 571-4716

WWW: http://www.ncrel.org/

### North Central Regional Technology in Education Consortium (NCRTEC)

ED established the Regional Technology in Education (R\*TEC) program in the fall of 1995 to help States, districts, schools, adult literacy centers, and other educational institutions use advanced technology to support improved teaching and student achievement. R\*TEC's role in educational technology is unique in two ways: the emphasis is regional and the primary goal is to ensure that technology is used effectively to support school reform. Program strategies include professional development, technical assistance, and information dissemination.

Randy Knuth, Director
NCRTEC
North Central Regional Educational
Laboratory
1900 North Spring Road, Suite 300
Oak Brook, IL 60521-1480
(630) 571-4710 / Fax: (630) 218-4989
E-mail: rknuth@ncrel.org
WWW: http://www.ncrtec.org/

Catherine Mozer Conner, R\*TEC Program Officer
U.S. Department of Education
Office of Educational Research and Improvement
ORAD/SLSD, Room 506a
555 New Jersey Avenue NW
Washington, DC 20208-5644
(202) 219-8070
E-mail: cconnor@inet.ed.gov

## ► Department of Energy (DOE)

### **Argonne National Laboratory**

The laboratory offers students research apprenticeship programs and sponsors contests, lectures, laboratory tours, and video series, as well as educational conferences and workshops. Student apprenticeships and research participation opportunities are offered for students in grades 10–12. Junior

high and high school teachers are eligible for teacher development and research participation appointments usually held during the summer months.

Margret E. M. Tolbert, Ph.D., Director Division of Educational Programs Argonne National Laboratory 9700 South Cass Avenue, Building 223 Argonne, IL 60439 (630) 252-4114 / Fax: (630) 252-3193 E-mail: tolbert@woody.dep.anl.gov

### Fermi National Accelerator Laboratory

Through its Leon M. Lederman Science Education Center, the laboratory offers institutes, workshops, and research experiences for teachers; a Teacher Resource Center including an Eisenhower National Clearinghouse Demonstration site; onsite environmental and physical science experiences; apprenticeships; and informal classes for students.

Marge Bardeen
Education Office
Fermi National Accelerator Laboratory
MS 226
PO Box 500
Batavia, IL 60510
(630) 840-2031 / Fax: (630) 840-8248
E-mail: mbardeen@fnal.gov

## ► Department of the Interior (DOI)

### **Bureau of Land Management Eastern States Office**

The Bureau of Land Management State Office provides information about educational programs, materials, and local land-management issues.

Education Coordinator Bureau of Land Management 7450 Boston Boulevard Springfield, VA 22153 (703) 440-1713

## Crab Orchard National Wildlife Refuge

Wildlife management and environmental education are emphasized in summer teacher workshops and youth camps at the refuge. Guided tours and curriculum materials are available upon request.

Public Use Manager Crab Orchard National Wildlife Refuge PO Box J Carterville, IL 62918 (618) 997-3344



### **Project WILD**

Project WILD offers teacher training and educational materials. Teacher guides, free to teachers who attend the training session, contain more than 80 supplementary, interdisciplinary activities for grades K-12.

Ann Pictor, Project WILD Coordinator Illinois Board of Education 100 North First Street Springfield, IL 62777 (217) 782-2826 / Fax: (217) 782-6097

Kathleen M. Andrews, Project WILD Coordinator Kids for Conservation Illinois Department of Conservation 524 South Second Street, Room 515 Springfield, IL 62701-1787 (217) 524-4126 / Fax: (217) 782-9552

## ► Department of Labor (DOL)

## Job Training Partnership Act (JTPA) Liaison

The JTPA Liaison can provide information about the Job Training Partnership Act State and local programs for economically disadvantaged adults and youth.

Herbert D. Dennis, Manager JTPA Programs Division Illinois Department of Commerce and Community Affairs 620 East Adams, Sixth Floor Springfield, IL 62701 (217) 785-6006 / Fax: (217) 785-6454

## ► Department of Transportation (DOT)

## Federal Aviation Administration (FAA) Aviation Education

The FAA Aviation Education Representative coordinates aviation education services, including materials and programs for the FAA in the States assigned to the region.

Programs include the following:

➤ The Aviation Career Education (ACE)
Academy is a one-week summer aviation
education program for high school students sponsored by the FAA along with a
host educational institution. The program
provides students with diverse experiences
in aviation career exploration. The focus
is on aviation career clusters identified by
FAA, with an emphasis on opportunities
for women and minorities. A goal is to

have one program in each State and U.S. Territory. The FAA will conduct regional leadership workshops and provide funds based on the availability of resources.

- ▶ Aviation Education Workshops for Teachers provide teachers with information on FAA aviation programs and materials and prepare them to teach aviation in the classroom. Annual workshops are conducted at colleges and universities across the Nation. The FAA provides information, materials, and speakers for the program.
- National Congress on Aviation and Space Education is sponsored annually by the FAA in partnership with the National Aeronautics and Space Administration and the Civil Air Patrol. The meeting includes teacher workshops and crosstalk sessions to exchange ideas on promoting aerospace education.

Lee Carlson, AGL-11, FAA Aviation Education Representative O'Hare Lake Officer Center 2300 East Devon Avenue Des Plaines, IL 60018 (708) 294-7042 / Fax: (708) 294-7368

### FAA Aviation Education Resource Centers

Located at colleges, museums, and State aviation authority offices, these centers function as information distribution centers for Federal Aviation Administration education materials and resources. The Resource Centers maintain and provide quantities of printed materials, videotapes, and computer educational software. Center personnel can also provide general information, conduct workshops, and make aviation-related presentations.

Paul McLaughlin, Associate Vice President and Dean Aviation Education Resource Center Parks College of St. Louis University 500 Falling Springs Road Cahokia, IL 62206 (618) 337-7500. ext. 364

Richard M. Ware Division of Aeronautics Aviation Education Resource Center State of Illinois One Langhorne Bond Drive, Capital Airport Springfield, IL 62707-8415 (217) 785-8516

Dr. Elaine Vitello Aviation Education Resource Center Southern Illinois University College of Technical Careers, Room 222 Carbondale, IL 62901 (618) 453-8821 Christine Wedam Rosario Northeastern Illinois University College of Education Chicago Teachers' Center 770 North Halsted Street, Suite 420 Chicago, IL 60622-5972 (312) 733-7330

## ► Environmental Protection Agency (EPA)

### **EPA** Regional Office

This office takes part in a variety of environmental education programs for both teachers and students. Programs range from teacher workshops and student contests to in-school presentations. Information on environmental issues is also available through the Public Information Center located at the office.

Suzanne Saric, Environmental Education Coordinator Environmental Protection Agency 77 West Jackson Boulevard (PI-19J) Chicago, IL 60604 (312) 353-3209 / Fax: (312) 353-1155

### The President's Environmental Youth Awards (PEYA) Program

Young people from each State are invited to participate in PEYA, a nationwide program designed to encourage individuals, school classes, summer camps, public interest groups, and youth organizations to promote environmental awareness and community involvement. The two components of the program are the regional certificate program and the National awards competition. Regional certificates, signed by the President, are awarded to each participant by EPA regional offices. National individual project winners, or one representative from a National awardwinning group project, along with one sponsor, are honored at EPA headquarters in Washington, DC. Interested K-12 individuals or groups may obtain application materials and contest rules by contacting the EPA Regional Office that serves their State. PEYA has been an ongoing project since it was created by the White House Office of Education and the EPA in 1971.

EPA Region 5 77 West Jackson Boulevard (PI-19J) Chicago, IL 60604 (800) 621-8431 / Fax: (312) 353-1155



# ► National Aeronautics and Space Administration (NASA)

### **NASA Educator Resource Center**

The center has NASA-related educational materials in various formats, including laserdiscs, CD-ROMs, videotapes, slides, audiotapes, publications, and teacher guides. Educators may preview or copy NASA materials upon request.

NASA Lewis Research Center Educator Resource Center 21000 Brookpark Road, MS 8-1 Cleveland, OH 44135-3191 (216) 433-2017

#### **NASA Field Centers**

Each field center has an educational programs officer who is responsible for precollege education programs. In addition to administering National programs, the center offers programs and services to meet regional and local needs.

Jo Ann Charleston, Acting Chief Office of Educational Programs NASA Lewis Research Center 21000 Brookpark Road, MS 7-4 Cleveland, OH 44135-3191 (216) 433-2957

### NASA Regional Educator Resource Center (RERC)

To offer more educators the opportunity to visit the Educator Resource Center Network (ERCN), NASA forms partnerships with planetariums, universities, museums, and other nonprofit organizations to serve as RERCs. Teachers may preview or copy NASA materials upon request.

Chicago Museum of Science and Industry NASA Regional Educator Resource Center 57th Street and Lakeshore Drive Chicago, IL 60637-2093 (312) 684-1414, ext. 2426

Parks College of St. Louis University NASA Regional Educator Resource Center Route 157 and Falling Springs Road Cahokia, IL 62206 (618) 337-7500

#### **Space Grant Consortium**

The Space Grant Consortium in each State consists of colleges, universities, industry, and other organizations that have an interest in aeronautics and space education. Each consortium receives NASA funds for use in implementing a balanced program of research, education, and public service.

Illinois Space Grant Consortium
Aeronautical and Astronautical Engineering
Department
104 South Wright Street
3067 Talbot Lab
University of Illinois at Urbana–Champaign
Urbana, IL 61801
(217) 244-7646

### Indiana

### ▶ Department of Agriculture (USDA)

#### 4-H State Leader

The State 4-H Youth Development Programs are administered by the Cooperative Extension Service at land-grant universities. State 4-H leaders coordinate outreach services and training to all county offices.

Dr. Maurice S. Kramer, Assistant Director Department Head, 4-H and Youth Development 1161 Agriculture Administration Building Purdue University West Lafayette, IN 47907-1161 (317) 494-8422 / Fax: (317) 496-1152 E-mail: msk@four\_h.purdue.edu

#### Ag in the Classroom State Leader

This program promotes increased understanding of agriculture and possible careers in the agricultural sciences. With National leadership provided by USDA, each State manages its own programs, with assistance from agribusiness, educational institutions, and government.

Harry L. Pearson, Indiana Farm Bureau PO Box 1290 Indianapolis, IN 46206 (317) 692-7851 / Fax: (317) 692-7854

Pam Bright, Office of Commission 150 West Market, Suite 414 Indianapolis, IN 46024 (317) 232-8769

## ► Department of Commerce (DOC)

### National Sea Grant College Program, Operation Pathfinder

The program consists of two-week summer courses that present an introduction to oceanographic and coastal processes. Courses are available in six regions and are designed to enhance skills in science teaching.

Al Miller and Jim Lubner University of Wisconsin Wisconsin Sea Grant 1800 University Avenue Madison, WI 53705-4094 (608) 262-0644 / Fax: (608) 263-2063

## ► Department of Education (ED)

#### **Eisenhower State Coordinators**

Eisenhower State Coordinators administer the Eisenhower Professional Development Program State Formula grants. The program focuses on sustained and intensive high-quality professional development through inservice programs.

Phyllis L. Usher Eisenhower Professional Development Program Indiana Department of Education 229 State House Indianapolis, IN 46204-2798 (317) 232-6984 / Fax: (317) 232-9121

## **Eisenhower State Coordinators** for Higher Education

Eisenhower State Coordinators oversee the Eisenhower Professional Development State Formula Grants for the State Agency for Higher Education (SAHE). The program focuses on teacher enhancement through both inservice and preservice programs.

Dr. Karen Rasmussen and Steven Laughner, Associate Commissioners Planning and Policy Studies Eisenhower Professional Development Program Indiana Commission for Higher Education 101 West Ohio, Suite 550 Indianapolis, IN 46204-1909 (317) 464-4400 / Fax: (317) 464-4410



### Midwest Consortium for Mathematics and Science Education

The Eisenhower Regional Consortium provides information and technical assistance to help States and school districts improve mathematics and science education.

Dr. Gilbert Valdez, Director Midwest Consortium for Mathematics and Science Education 1900 Spring Road, Suite 300 Oak Brook, IL 60521 (708) 571-4700 / Fax: (708) 571-4716 WWW: http://www.ncrel.org/msc/msc.htm

## North Central Regional Educational Laboratory (NCREL)

NCREL identifies effective teaching techniques and school improvement efforts within the region and shares this information with State and local educators.

Jeri Nowakowski, Executive Director NCREL 1900 Spring Road, Suite 300 Oak Brook, IL 60521 (708) 571-4700 / Fax: (708) 571-4716 WWW: http://www.ncrel.org/

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ED established the Regional Technology in Education (R\*TEC) program in the fall of 1995 to help States, districts, schools, adult literacy centers, and other educational institutions use advanced technology to support improved teaching and student achievement. R\*TEC's role in educational technology is unique in two ways: the emphasis is regional and the primary goal is to ensure that technology is used effectively to support school reform. Program strategies include professional development, technical assistance, and information dissemination.

Randy Knuth, Director NCRTEC North Central Regional Educational Laboratory 1900 North Spring Road, Suite 300 Oak Brook, IL 60521-1480 (630) 571-4710 / Fax: (630) 218-4989 E-mail: rknuth@ncrel.org WWW: http://www.ncrtec.org/ Catherine Mozer Conner, R\*TEC Program Officer

U.S. Department of Education Office of Educational Research and Improvement ORAD/SLSD, Room 506a

555 New Jersey Avenue NW Washington, DC 20208-5644 (202) 219-8070

E-mail: cconnor@inet.ed.gov

### ▶ Department of the Interior (DOI)

### Bureau of Land Management Eastern States Office

The office provides information about educational programs, materials, and local land-management issues.

Education Coordinator Bureau of Land Management 7450 Boston Boulevard Springfield, VA 22153 (703) 440-1713

#### Indiana Dunes National Lakeshore

Lakeshore programs, including guided walks and teacher guides, focus on lakeshore ecology. Specific programs include the following:

- ▶ A Grain of Truth allows participants to observe winds and waves at work creating, shaping, eroding, and moving dunes. Students hike approximately one mile along beach and dune trails to learn about the processes of glaciation, erosion, and dune building. The specific activities and interpretive techniques used will be adapted to the experience and abilities of the group and special circumstances that may exist on the day of the program.
- ► The Biological Diversity Program
  explores whether we could survive without the incredible variety of plant and animal life that shares the Earth with us.
  Participants investigate the great variety of living organisms and communities, and learn of the importance of biodiversity to the continued existence of living ecosystems
- Discover allows participants to be detectives to find all the clues to the wonders of nature. By using their senses, students find what's new and what's old.
- ▶ The Earth Day Celebration invites students to explore how our consumptive lifestyle affects our environment. Subjects include habitat loss, pollution, endangered species, and recycling. Indoor and outdoor activities help students develop a

- sense of belonging to the natural environment and show them actions they can take to help protect it.
- ► Fall Fanfare explores the many changes in the dunes at this season. Students search the dunes and forests for evidence of change and learn of fall activities and adaptations that plants and animals use to prepare for winter.
- ▶ Fire Ecology investigates the properties behind fire's dynamic force. Students learn why some ecosystems need fire to maintain themselves. Methods of prescribed burn and fire management using current technology are described.
- ► Fire Friend or Foe teaches students how some plants need fire to survive.

  Participants explore the nutrient cycle and discuss fire's use as a tool for managing our natural resources. Safety equipment used in fire suppression by National Park Service Rangers is explained.
- ▶ Habitats Hike helps students discover why Indiana Dunes has the third largest number of plant species in the entire National Park System. Participants investigate the many habitats, including a forested dune, wetland area, and a sand prairie, and learn about the diversity of life each supports.
- ▶ Lake Michigan Alive features the life cycles of the lake. Students experience the predator/prey relationships and discuss the differences of aquatic life from land animals. Individual groups participate in reenacting the day-to-day struggles of a lake creature.
- ▶ Let's Get Wild About Wildlife answers such questions as, Who lives in that cattail mound? Who's swooping down to grab that mouse? Who gnawed on that tree branch? On a hike students become detectives searching for animal homes and signs. Students will see and be able to touch a box turtle or snake. Other indoor and outdoor activities will teach students about animal habitat and predator/prey relationships. By the end of the program, students will realize that wildlife habitat is being destroyed. They will be able to name ways to help protect wildlife.
- ▶ Mother Nature's Recycling Center allows students to investigate the process of decomposition and renewal during a walk in the woods at the Douglas Center. Participants learn what they can recycle at home to save energy and space. They develop creative and critical thinking abilities using reading, writing, and math skills, while learning about recycling in nature and our communities.



- ▶ Mount Baldy Moves gives students the chance to climb a dune, hike along a wooded trail and catch a spectacular view of Lake Michigan. Participants in role-playing activities learn how wind, water, waves, and plants work together to form dunes. Also described are the ways in which humans have altered dune formations.
- ▶ Out on a Limb allows students to explore the mysterious inner workings of the forest community. By using a key, students will learn to identify trees. Through a rotten log study, they will uncover the importance of fungi and bacteria. Activities will reveal people's dependence on forests and the need for wise management of our forests.
- ▶ Pinhook Bog was born during the retreat of the last glacier, when a chunk of glacier fell off into a clay area and created a kettle lake. Through the course of the next 10,000 years, as sphagnum moss moved in and closed off the lake, a unique environment of insect-eating plants, highly acidic water and quaking earth, and delicious blueberries was created. The specific activities and interpretive techniques used will be adapted to the experience and abilities of the group and special circumstances that exist on the day of the program.
- Reflections on Snow helps students discover winter while hiking or cross-country skiing in Miller Woods. Indoor activities explore tracking, predation, and winter habitats.
- ▶ The Secrets of Succession allows participants to travel through time from beach and dunes through jack pine forests to ancient oak-covered dunes. On this approximately one-mile hike, students discover how the dynamic process of dune succession works by measuring the sunlight, wind speed, percolation rate, soil moisture, and soil temperature of four biological communities. The specific activities and interpretive techniques used will be adapted to the experience and abilities of the group and special circumstances that may exist on the day of the program.
- Survival of the Fittest teaches students that each species has adaptations that allow it to survive in its habitat. Also discussed is how predator/prey relationships allow wildlife to maintain an acceptable balance in nature.
- ► Talk with the Animals is a puppet show in which students meet characters such as Otis Oak, Patty Poison Ivy, Sammy Skunk, Freddie Frog, and Carl Cattail. As the puppets talk, they reveal their secret haunts and habits. Students will see how

- the animals and plants of Miller Woods work together as neighbors. On a short walk around a pond and through a forest, students search for the springtime activity of plants and animals.
- ► Tracking Animals familiarizes students with animal signs such as tracks, droppings, gnawings, scratchings, rubs, dams, nests, and burrows. Noting these signs can open up a whole new story in an otherwise familiar setting.
- ▶ Water, Water Everywhere provides valuable information on the sources of water, the water cycle, and conservation of this precious resource. Through activities and the use of a groundwater model, students discover the value of water.
- ▶ In Water World, students use nets and pans to study and collect insects from a pond. Indoors, students will use microscopes to identify pond plants and animals. Through this pond life investigation and a movie, students discover the rich diversity of pond life. From indoor activities, students learn about the history of water pollution and its effect on water quality and pond life diversity. Also, they learn about the scarcity of pure, useable water and about ways that they can use water more wisely.
- Winter Exploration allows students to admire the beauty of the winter woods, search for signs of winter, and seek the food and shelter of animals. Activities help students to understand how plants and animals adapt to survive the winter. An indoor discussion will precede either hiking or snowshoeing through the woods.
- ► In Winter Wonderland, students discover what animals do to prepare for winter.

Bruce Rowe, Environmental Education Program Manager Indiana Dunes National Lakeshore 1100 N. Mineral Springs Porter, IN 46304 (219) 938-8221 / Fax: (219) 926-7561

## Muscatatuck National Wildlife Refuge

With a focus on waterfowl management, the refuge offers an orientation, an audiovisual presentation, and self-guided walks.

Division of Interpretation Muscatatuck National Wildlife Refuge 12985 East U.S. Highway 50 Seymour, IN 47274 (812) 522-4352 / Fax: (812) 522-6826

### **Project WILD**

Project WILD offers teacher training and educational materials. Teacher guides, free to teachers who attend the training session, contain more than 80 supplementary, interdisciplinary activities for grades K–12.

Warren Gartner, Project WILD Coordinator Indiana Department of Natural Resources 6013 Lakeside Boulevard Indianapolis, IN 46278-1996 (317) 290-3223 / Fax: (317) 290-3225

## ► Department of Labor (DOL)

## Job Training Partnership Act (JTPA) Liaison

The JTPA Liaison can provide information about the Job Training Partnership Act State and local programs for economically disadvantaged adults and youth.

Bruce F. Kearney, Acting Commissioner Indiana Department of Workforce Development 10 North Senate Avenue, Room 302 Indianapolis, IN 46204 (317) 232-7670 / Fax: (317) 233-4793

### ▶ Department of Transportation (DOT)

### Federal Aviation Administration (FAA) Aviation Education

The FAA Aviation Education Representative coordinates aviation education services, including materials and programs for the FAA in the States assigned to the region.

Programs include the following:

- The Aviation Career Education (ACE)
  Academy is a one-week summer aviation education program for high school students sponsored by the FAA along with a host educational institution. The program provides students with diverse experiences in aviation career exploration. The focus is on aviation career clusters identified by FAA, with an emphasis on opportunities for women and minorities. A goal is to have one program in each State and U.S. Territory. The FAA will conduct regional leadership workshops and provide funds based on the availability of resources.
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the Nation. The FAA provides information, materials, and speakers for the program.

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Lee Carlson, AGL-11, FAA Aviation Education Representative O'Hare Lake Officer Center 2300 East Devon Avenue Des Plaines, IL 60018 (708) 294-7042 / Fax: (708) 294-7368

### **FAA Aviation Education Resource Centers**

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Hassan Chaharlang, ICPAC Hotline Director Indiana College of Placement and Assessment Center 2805 East 10th Street Bloomington, IN 47408 (812) 855-8475

## ► Environmental Protection Agency (EPA)

#### **EPA** Regional Office

This office takes part in a variety of environmental education programs for both teachers and students. Programs range from teacher workshops and student contests to in-school presentations. Information on environmental issues is also available through the Public Information Center located at the office.

Suzanne Saric, Environmental Education Coordinator Environmental Protection Agency 77 West Jackson Boulevard (PI-19J) Chicago, IL 60604 (312) 353-3209 / Fax: (312) 353-1155

## The President's Environmental Youth Awards (PEYA) Program

Young people from each State are invited to participate in PEYA, a nationwide program

designed to encourage individuals, school classes, summer camps, public interest groups, and youth organizations to promote environmental awareness and community involvement. The two components of the program are the regional certificate program and the National awards competition. Regional certificates, signed by the President, are awarded to each participant by EPA regional offices. National individual project winners. or one representative from a National awardwinning group project, along with one sponsor, are honored at EPA headquarters in Washington, DC. Interested K-12 individuals or groups may obtain application materials and contest rules by contacting the EPA Regional Office that serves their State. PEYA has been an ongoing project since it was created by the White House Office of Education and the EPA in 1971.

EPA Region 5 77 West Jackson Boulevard (PI-19J) Chicago, IL 60604 (800) 621-8431 / Fax: (312) 353-1155

# ► National Aeronautics and Space Administration (NASA)

#### **NASA Educator Resource Center**

The center has NASA-related educational materials in various formats, including laserdiscs, CD-ROMs, videotapes, slides, audiotapes, publications, and teacher guides. Educators may preview or copy NASA materials upon request.

NASA Lewis Research Center Educator Resource Center 21000 Brookpark Road, MS 8-1 Cleveland, OH 44135-3191 (216) 433-2017

#### **NASA Field Centers**

Each field center has an educational programs officer who is responsible for precollege education programs. In addition to administering National programs, the center offers programs and services to meet regional and local needs.

Jo Ann Charleston, Acting Chief Office of Educational Programs NASA Lewis Research Center 21000 Brookpark Road, MS 7-4 Cleveland, OH 44135-3191 (216) 433-2957

### NASA Regional Educator Resource Center (RERC)

To offer more educators the opportunity to visit the Educator Resource Center Network

(ERCN), NASA forms partnerships with planetariums, universities, museums, and other nonprofit organizations to serve as RERCs. Teachers may preview or copy NASA materials upon request.

University of Evansville NASA Regional Educator Resource Center School of Education 1800 Lincoln Avenue Evansville, IN 47722 (812) 479-2393

#### **Space Grant Consortium**

The Space Grant Consortium in each State consists of colleges, universities, industry, and other organizations that have an interest in aeronautics and space education. Each consortium receives NASA funds for use in implementing a balanced program of research, education, and public service.

Indiana Space Grant Consortium School of Aeronautics and Astronautics 1282 Grissom Hall, Purdue University West Lafayette, IN 47907-1282 (317) 494-5117

### Iowa

### Department of Agriculture (USDA)

#### 4-H State Leader

The State 4-H Youth Development Programs are administered by the Cooperative Extension Service at land-grant universities. State 4-H leaders coordinate outreach services and training to all county offices.

Dr. Joseph R. Kurth, Director for Youth and 4-H 33 Curtiss Hall Iowa State University Ames, IA 50011 (515) 294-1018 / Fax: (515) 294-4443 E-mail: x1kurth@exnet.iastate.edu

### Ag in the Classroom State Leader

This program promotes increased understanding of agriculture and possible careers in the agricultural sciences. With National leadership provided by USDA, each State manages its own programs, with assistance from agribusiness, educational institutions, and government.

Barbara J. Lykins Iowa Farm Bureau Federation 5400 University Avenue West Des Moines, IA 50266-5997 (515) 225-5425 / Fax: (515) 225-5419

### ▶ Department of Education (ED)

### **Eisenhower State Coordinators**

Eisenhower State Coordinators administer the Eisenhower Professional Development Program State Formula grants. The program focuses on sustained and intensive high-quality professional development through inservice programs.

Dr. John Wheeler, Chief Bureau of Instructional Services Eisenhower Professional Development Program Iowa Department of Education Grimes State Office Building Des Moines, IA 50319-0145 (515) 281-3874 / Fax: (515) 242-5988

## Eisenhower State Coordinators for Higher Education

Eisenhower State Coordinators oversee the Eisenhower Professional Development State Formula Grants for the State Agency for Higher Education (SAHE). The program focuses on teacher enhancement through both inservice and preservice programs.

Dr. Robert J. Barak, Deputy Executive Director Eisenhower Professional Development Program Iowa State Board of Regents East 12th Street and Grand Avenue Old Historical Building Des Moines, IA 50319 (515) 281-3934 / Fax: (515) 281-6420

### Midwest Consortium for Mathematics and Science Education

The Eisenhower Regional Consortium provides information and technical assistance to help States and school districts improve mathematics and science education.

Dr. Gilbert Valdez, Director Midwest Consortium for Mathematics and Science Education 1900 Spring Road, Suite 300 Oak Brook, IL 60521 (708) 571-4700 / Fax: (708) 571-4716 WWW: http://www.ncrel.org/msc/msc.htm

### North Central Regional Educational Laboratory (NCREL)

NCREL identifies effective teaching techniques and school improvement efforts within the region and shares this information with State and local educators.

Jeri Nowakowski, Executive Director NCREL 1900 Spring Road, Suite 300 Oak Brook, IL 60521 (708) 571-4700 / Fax: (708) 571-4716 WWW: http://www.ncrel.org/

### North Central Regional Technology in Education Consortium (NCRTEC)

ED established the Regional Technology in Education (R\*TEC) program in the fall of 1995 to help States, districts, schools, adult literacy centers, and other educational institutions use advanced technology to support improved teaching and student achievement. R\*TEC's role in educational technology is unique in two ways: the emphasis is regional and the primary goal is to ensure that technology is used effectively to support school reform. Program strategies include professional development, technical assistance, and information dissemination.

Randy Knuth, Director NCRTEC North Central Regional Educational Laboratory 1900 North Spring Road, Suite 300 Oak Brook, IL 60521-1480 (630) 571-4710 / Fax: (630) 218-4989 E-mail: rknuth@ncrel.org WWW: http://www.ncrtec.org/

Catherine Mozer Conner, R\*TEC Program Officer
U.S. Department of Education
Office of Educational Research and Improvement
ORAD/SLSD, Room 506a
555 New Jersey Avenue NW
Washington, DC 20208-5644
(202) 219-8070
E-mail: cconnor@inet.ed.gov

## ► Department of Energy (DOE)

### Adventures in Supercomputing (AiS)

This program is designed to foster and enhance the participation of diverse populations of high school students in mathematics, science, and computing.

Barbara G. Summers, Education Program Manager Oak Ridge National Laboratory Office of University and Science Education PO Box 2008, MS 6366 Oak Ridge, TN 37831-6366 (423) 241-3705 / Fax: (423) 241-6776 E-mail: summersbg@ornl.gov

### **Ames Laboratory**

The laboratory offers teacher workshops in science and mathematics. Educational programs, including contests, classes, and mentoring, are also available for students.

Connie Hargrave, Ph.D., Manager Ames Laboratory Education Programs 252 TASF Ames Laboratory Iowa State University Ames, IA 50011 (515) 294-5343 / Fax: (515) 294-6206 E-mail: cph@iastate.edu

### ▶ Department of the Interior (DOI)

## **Bureau of Land Management Eastern States Office**

The office provides information about educational programs, materials, and local land-management issues.

Education Coordinator Bureau of Land Management 7450 Boston Boulevard Springfield, VA 22153 (703) 440-1713

#### **DeSoto National Wildlife Refuge**

The refuge offers guided walks and materials that focus on prairie ecology, bird migration, and basic environmental education.

Outdoor Recreation Planner DeSoto National Wildlife Refuge Rural Route 1, Box 114 Missouri Valley, IA 51555 (712) 642-4121 / Fax: (712) 271-4210

#### **Project WILD**

Project WILD offers teacher training and educational materials. Teacher guides, free to teachers who attend the training session, contain more than 80 supplementary, interdisciplinary activities for grades K–12.

Duane Toomsen, Project WILD Coordinator Department of Public Instruction Grimes State Office Building Des Moines, IA 50309 (515) 281-3146 / Fax: (515) 242-6025



Barb Giger, Aquatic WILD Coordinator Department of Natural Resources 2473 160th Road Guthrie Center, IA 50115 (515) 747-2200 / Fax: (515) 747-3951

### ▶Department of Labor (DOL)

### Job Training Partnership Act (JTPA) Liaison

The JTPA Liaison can provide information about the Job Training Partnership Act State and local programs for economically disadvantaged adults and youth.

Jeff Nall, Administrator Division of Workforce Development Iowa Department of Economic Development 150 Des Moines Street Des Moines, IA 50309 (515) 281-9013 / Fax: (515) 242-9033

## ► Department of Transportation (DOT)

### Federal Aviation Administration (FAA) Aviation Education

The FAA Aviation Education Representative coordinates aviation education services, including materials and programs for the FAA in the States assigned to the region.

Programs include the following:

- ▶ The Aviation Career Education (ACE)
  Academy is a one-week summer aviation
  education program for high school students sponsored by the FAA along with a
  host educational institution. The program
  provides students with diverse experiences
  in aviation career exploration. The focus
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  based on the availability of resources.
- ▶ Aviation Education Workshops for Teachers provide teachers with information on FAA aviation programs and materials and prepare them to teach aviation in the classroom. Annual workshops are conducted at colleges and universities across the Nation. The FAA provides information, materials, and speakers for the program.
- ► National Congress on Aviation and Space Education is sponsored annually by the

FAA in partnership with the National Aeronautics and Space Administration and the Civil Air Patrol. The meeting includes teacher workshops and crosstalk sessions to exchange ideas on promoting aerospace education.

Maria Navarro, ACE-10, FAA Aviation Education Representative 601 East 12th Street Federal Building, Room 1501 Kansas City, MO 64106 (816) 426-3046 / Fax: (816) 426-3091

### FAA Aviation Education Resource Centers

Located at colleges, museums, and State aviation authority offices, these centers function as information distribution centers for Federal Aviation Administration education materials and resources. The Resource Centers maintain and provide quantities of printed materials, videotapes, and computer educational software. Center personnel can also provide general information, conduct workshops, and make aviation-related presentations.

Julie Wilkinson IRTS Aviation Education Resource Center The University of Northern Iowa 222 Schindler Education Center Cedar Falls. IA 50614-0610

### Environmental Protection Agency (EPA)

#### **EPA** Regional Office

(319) 273-2717

This office takes part in a variety of environmental education programs for both teachers and students. Programs range from teacher workshops and student contests to in-school presentations. Information on environmental issues is also available through the Public Information Center located at the office.

Rowena Michaels, Environmental Education Coordinator Environmental Protection Agency 726 Minnesota Avenue

Kansas City, KS 66101 (913) 551-7003 / Fax: (913) 551-7066

## The President's Environmental Youth Awards (PEYA) Program

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involvement. The two components of the program are the regional certificate program and the National awards competition. Regional certificates, signed by the President, are awarded to each participant by EPA regional offices. National individual project winners, or one representative from a National awardwinning group project, along with one sponsor, are honored at EPA headquarters in Washington, DC. Interested K-12 individuals or groups may obtain application materials and contest rules by contacting the EPA Regional Office that serves their State. PEYA has been an ongoing project since it was created by the White House Office of Education and the EPA in 1971.

EPA Region 7 726 Minnesota Avenue Kansas City, KS 66101 (913) 551-7003 / Fax: (913) 551-7066

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#### **NASA Educator Resource Center**

The center has NASA-related educational materials in various formats, including laserdiscs, CD-ROMs, videotapes, slides, audiotapes, publications, and teacher guides. Educators may preview or copy NASA materials upon request.

U.S. Space and Rocket Center NASA Educator Resource Center for Marshall Space Flight Center PO Box 070015 Huntsville, AL 35807-7015 (205) 544-5812

### **NASA Field Centers**

Each field center has an educational programs officer who is responsible for precollege education programs. In addition to administering National programs, the center offers programs and services to meet regional and local needs.

Jim Pruitt, Acting Director Education Programs Office Mail Code CL01 NASA Marshall Space Flight Center Huntsville, AL 35812-0001 (205) 544-8800

## NASA Regional Educator Resource Center (RERC)

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RERCs. Teachers may preview or copy NASA materials upon request.

University of Northern Iowa NASA Regional Educator Resource Center IRTS, Room 222, Schindler Education Center Cedar Falls, IA 50614-0009 (319) 273-6066

### **Space Grant Consortium**

The Space Grant Consortium in each State consists of colleges, universities, industry, and other organizations that have an interest in aeronautics and space education. Each consortium receives NASA funds for use in implementing a balanced program of research, education, and public service.

Iowa Space Grant Consortium 408 Town Engineering Building Iowa State University Ames, IA 50011-3231 (515) 294-3106

### Michigan

## ► Department of Agriculture (USDA)

#### 4-H State Leader

The State 4-H Youth Development Programs are administered by the Cooperative Extension Service at land-grant universities. State 4-H leaders coordinate outreach services and training to all county offices.

Sandy Clarkson, Associate Program Director 4-H Youth Program 6H Berkey Hall Michigan State University East Lansing, MI 48824-1111 (517) 355-0180 / Fax: (517) 355-6748 E-mail: clarkson@msuces.canr.msu.edu

### Ag in the Classroom State Leader

This program promotes increased understanding of agriculture and possible careers in the agricultural sciences. With National leadership provided by USDA, each State manages its own programs, with assistance from agribusiness, educational institutions, and government.

Dr. Eddie Moore Michigan State University 410 Agriculture Hall East Lansing, MI 48824 (517) 355-6580 / Fax: (517) 323-1888 Julie Chamberlain Michigan Farm Bureau 7373 West Saginaw Highway Lansing, MI 48909 (517) 323-7000 / Fax: (517) 323-6793

## **▶** Department of Commerce (DOC)

### Great Lakes Environmental Research Laboratory

The laboratory participates in a local partnership program and offers tours of facilities and discussion on Great Lake problems.

Tom Nalepa Great Lakes Environmental Research Laboratory National Oceanic and Atmospheric Administration 2205 Commonwealth Boulevard Ann Arbor, MI 48105-1593 (313) 741-2285 / Fax: (313) 741-2055

### National Sea Grant College Program, Operation Pathfinder

The program consists of two-week summer courses that present an introduction to oceanographic and coastal processes. Courses are available in six regions and are designed to enhance skills in science teaching.

Al Miller and Jim Lubner University of Wisconsin Wisconsin Sea Grant 1800 University Avenue Madison, WI 53705-4094 (608) 262-0644 / Fax: (608) 263-2063

## ► Department of Education (ED)

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Sue K. Harrison
Eisenhower Professional Development
Program
Michigan Department of Education
PO Box 30008
Lansing, MI 48909
(517) 373-1236 / Fax: (517) 335-2473

## Eisenhower State Coordinators for Higher Education

Eisenhower State Coordinators oversee the Eisenhower Professional Development State Formula Grants for the State Agency for Higher Education (SAHE). The program focuses on teacher enhancement through both inservice and preservice programs.

Barbara Johnson Eisenhower Professional Development Program Michigan Department of Education Higher Education Management Services PO Box 30008 Lansing, MI 48909 (517) 373-8577 / Fax: (517) 373-2759

### Midwest Consortium for Mathematics and Science Education

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### ▶Department of the Interior (DOI)

### **Bureau of Land Management Eastern States Office**

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Education Coordinator Bureau of Land Management 7450 Boston Boulevard Springfield, VA 22153 (703) 440-1713

#### Isle Royale National Park

Summer programs at the park offer curriculum-related information on natural resource issues to students in grades three to six. Park rangers visit schools in the winter.

Wolves and Wetlands of Isle Royale National Park consists of traveling trunks used to educate students about the important role predators and wetlands play in the natural world and their significance to the park.

Terry Lindsay, Interpretive Specialist Isle Royale National Park 800 East Lakeshore Drive Houghton, MI 49931 (906) 482-0986 / Fax: (906) 482-8753

### Pictured Rocks National Lakeshore

Natural Science Awareness is a science enrichment program for students and teachers in the county adjoining the lakeshore. Emphasis is on teaching seven basic ecology concepts (energy flow, cycles, diversity, community, interrelationships, change, adaptation) and thinking skills through in-class

activities, field trips, and the scientific method. Educational equipment and materials are available for loan.

David B. Kronk, Education Specialist Pictured Rocks National Lakeshore PO Box 40 Munising, MI 49862-0040 (906) 387-2607 / Fax: (906) 387-4025

### **Project WILD**

Project WILD offers teacher training and educational materials. Teacher guides, free to teachers who attend the training session, contain more than 80 supplementary, interdisciplinary activities for grades K-12.

Dale Elshoff, Project WILD Coordinator Tollgate Education Center 28115 Meadowbrook Road Novi, MI 48377-3128 (810) 347-3860 / Fax: (810) 347-3862

### Seney National Wildlife Refuge

Spring and fall environmental education programs at the refuge inform students about wildlife management. Guided walks and inclass presentations are also available.

Division of Interpretation Seney National Wildlife Refuge HCR #2, Box 1 Seney, MI 49883 (906) 586-9851 / Fax: (906) 586-3800

## ► Department of Labor (DOL)

## Job Training Partnership Act (JTPA) Liaison

The JTPA Liaison can provide information about the Job Training Partnership Act State and local programs for economically disadvantaged adults and youth.

Douglas E. Stites, Vice President Michigan Jobs Commission PO Box 30015 Lansing, MI 48909 (517) 373-6227 / Fax: (517) 373-0314

## ► Department of Transportation (DOT)

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Lee Carlson, AGL-11, FAA Aviation Education Representative O'Hare Lake Officer Center 2300 East Devon Avenue Des Plaines, IL 60018 (708) 294-7042 / Fax: (708) 294-7368

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Karen Conrad, Interim Director Aviation Education Resource Center Oakland University Aviation and Space Center 216 O'Dowd Hall, Room 216 Rochester, MI 48309-4401 (313) 370-2485



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Barbara Koscak Aviation Education Resource Center Project STARS PO Box 450082, Building 814 Selfridge ANG Base, MI 48045 (313) 466-4884

Thomas Krashen, Manager Michigan Department of Transportation Bureau of Aeronautics 2700 East Airport Service Drive Lansing, MI 48906 (517) 335-9977

## ► Environmental Protection Agency (EPA)

### **EPA Regional Office**

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Suzanne Saric, Environmental Education Coordinator Environmental Protection Agency 77 West Jackson Boulevard (PI-19J) Chicago, IL 60604 (312) 353-3209 / Fax: (312) 353-1155

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Central Michigan University NASA Regional Educator Resource Center Ronan Hall, Room 101 Mt. Pleasant, Ml 48859 (517) 774-4387

Northern Michigan University NASA Regional Educator Resource Center Olson Library Media Center Marquette, MI 49855 (906) 227-2270

Oakland University NASA Regional Educator Resource Center O'Dowd Hall, Room 216 Rochester, MI 48309-4401 (313) 370-2485 or 4230

#### **Space Grant Consortium**

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other organizations that have an interest in aeronautics and space education. Each consortium receives NASA funds for use in implementing a balanced program of research, education, and public service.

Michigan Space Grant Consortium 2106 SRB, University of Michigan Ann Arbor, MI 48109-2143 (313) 764-9508

## ► National Science Foundation (NSF)

### Statewide Systemic Initiatives (SSI) Program

One goal of Michigan's SSI Program is to summarize research on new kinds of science and mathematics teaching. Other goals include increasing State guidance for local efforts, creating schools to address needs of low-achieving and disadvantaged populations, redesigning teacher education, and stimulating and supporting district efforts.

Nancy Mincemoyer Michigan Department of Education PO Box 30008 Lansing, MI 48909 (517) 373-4990 / Fax: (517) 373-3241

Teresa Staten Michigan Department of Education PO Box 30008 Lansing, MI 48909 (517) 373-7248 / Fax: (517) 373-4589

### **Minnesota**

### ▶ Department of Agriculture (USDA)

#### 4-H State Leader

The State 4-H Youth Development Programs are administered by the Cooperative Extension Service at land-grant universities. State 4-H leaders coordinate outreach services and training to all county offices.

Carol Shields, Director, 4-H 1420 Eckles Avenue, 340 Coffey Hall University of Minnesota St. Paul, MN 55108 (612) 625-1235 or 9700 / Fax: (612) 625-1731 E-mail: cshields@mes.umn.edu



#### Ag in the Classroom State Leader

This program promotes increased understanding of agriculture and possible careers in the agricultural sciences. With National leadership provided by USDA, each State manages its own programs, with assistance from agribusiness, educational institutions, and government.

Alan Withers Minnesota Department of Agriculture 90 West Plato Boulevard St. Paul, MN 55107 (612) 296-6688 / Fax: (612) 297-5522

### ▶ Department of Commerce (DOC)

### National Sea Grant College Program, Operation Pathfinder

The program consists of two-week summer courses that present an introduction to oceanographic and coastal processes. Courses are available in six regions and are designed to enhance skills in science teaching.

Al Miller and Jim Lubner University of Wisconsin Wisconsin Sea Grant 1800 University Avenue Madison, WI 53705-4094 (608) 262-0644 / Fax: (608) 263-2063

### ▶ Department of Education (ED)

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Robert Crumpton
Eisenhower Professional Development
Program
Minnesota Department of Education
Capitol Square Building, Room 922
St. Paul, MN 55101
(612) 296-2703 / Fax: (612) 296-3272

### **Eisenhower State Coordinators** for Higher Education

Eisenhower State Coordinators oversee the Eisenhower Professional Development State Formula Grants for the State Agency for Higher Education (SAHE). The program focuses on teacher enhancement through both inservice and preservice programs.

Nancy B. Walters
Eisenhower Mathematics and Science
Program
Minnesota Higher Education Coordinating
Board
Capitol Square Building, Suite 400
550 Cedar Street
St. Paul, MN 55101
(612) 296-9777 / Fax: (612) 297-8880

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Officer
U.S. Department of Education
Office of Educational Research and
Improvement
ORAD/SLSD, Room 506a
555 New Jersey Avenue NW
Washington, DC 20208-5644
(202) 219-8070
E-mail: cconnor@inet.ed.gov

## ► Department of the Interior (DOI)

### **Bureau of Land Management Eastern States Office**

The Bureau of Land Management State Office provides information about educational programs, materials, and local land-management issues.

Education Coordinator Bureau of Land Management 7450 Boston Boulevard Springfield, VA 22153 (703) 440-1713

### Minnesota Valley National Wildlife Refuge

In addition to environmental education programs, the Minnesota Valley National Wildlife Refuge offers plant and animal exhibits, interactive displays, computer programs, and interpretive lectures.

Other programs include the following:

- The Explorer Post is a high school student program that focuses on natural resource careers.
- ► The Partner School Program provides special benefits to participating schools, such as staff-led and offsite programs and equipment. This, in turn, benefits the Refuge by allowing the school to help with different projects.
- School Group Orientations provide an introduction to the ecology of the refuge.
- Teacher Workshops allow local teachers and youth leaders to visit the refuge to learn about the site and participate in hands-on curriculum activities that are available for students.

Suzanne Trapp, Park Ranger Minnesota Valley NWR 3815 East 80th Street Bloomington, MN 55425 (612) 854-5900 / Fax: (612) 725-3279 E-mail: Suzanne\_Trapp@mail.fws.gov



### **Pipestone National Monument**

Lectures on anthropology and geology of the monument are available.

Division of Interpretation Pipestone National Monument Box 727 Pipestone, MN 56164 (507) 825-5464

### **Project WILD**

Project WILD offers teacher training and educational materials. Teacher guides, free to teachers who attend the training session, contain more than 80 supplementary, interdisciplinary activities for grades K–12.

Jan Orr, Acting Project WILD Coordinator Department of Natural Resources Box 7, 500 Lafayette Road St. Paul, MN 55155 (612) 297-4966 / Fax: (612) 297-4961

### Voyageurs National Park

The park offers environmental education programs targeted primarily to fourth graders, although arrangements can be made for students of other age groups.

Kids and Their Environment is designed to introduce northern Minnesota and southern Ontario school children to the diverse cultural and natural history that is unique to this area. A 49-passenger park tour boat serves as a floating classroom, transporting fourth, fifth, and sixth grade children throughout the park. Children visit an active beaver pond to learn how the beaver affects both flora and fauna by altering the surrounding environment through dam building that creates critical wetlands. Program participants visit an active bald eagle nest and learn about threatened and endangered species. Children also learn about the French Canadian "Voyageurs," their way of life, hardships, and importance as explorers.

Ron Meer, Environmental Education Coordinator Voyageurs National Park 3131 Highway 53 International Falls, MN 56649-8904 (218) 283-9821 / Fax: (218) 285-7407

## ► Department of Labor (DOL)

## Job Training Partnership Act (JTPA) Liaison

The JTPA Liaison can provide information about the Job Training Partnership Act State and local programs for economically disadvantaged adults and youth.

Byron Lee Zuidema, Assistant Commissioner Community Based Services Minnesota Department of Jobs and Training 390 North Robert Street, Fifth Floor St. Paul, MN 55101 (612) 296-4657 / Fax: (612) 296-5745

### ► Department of Transportation (DOT)

### Federal Aviation Administration (FAA) Aviation Education

The FAA Aviation Education Representative coordinates aviation education services, including materials and programs for the FAA in the States assigned to the region.

Programs include the following:

- ▶ The Aviation Career Education (ACE)
  Academy is a one-week summer aviation
  education program for high school students sponsored by the FAA along with a
  host educational institution. The program
  provides students with diverse experiences
  in aviation career exploration. The focus
  is on aviation career clusters identified by
  FAA, with an emphasis on opportunities
  for women and minorities. A goal is to
  have one program in each State and U.S.
  Territory. The FAA will conduct regional
  leadership workshops and provide funds
  based on the availability of resources.
- ▶ Aviation Education Workshops for Teachers provide teachers with information on FAA aviation programs and materials and prepare them to teach aviation in the classroom. Annual workshops are conducted at colleges and universities across the Nation. The FAA provides information, materials, and speakers for the program.
- ▶ National Congress on Aviation and Space Education is sponsored annually by the FAA in partnership with the National Aeronautics and Space Administration and the Civil Air Patrol. The meeting includes teacher workshops and crosstalk sessions to exchange ideas on promoting aerospace education.

Lee Carlson, AGL-11FAA Aviation Education Representative O'Hare Lake Officer Center 2300 East Devon Avenue Des Plaines, IL 60018 (708) 294-7042 / Fax: (708) 294-7368 (708) 294-7691

### FAA Aviation Education Resource Centers

Located at colleges, museums, and State aviation authority offices, these centers function

as information distribution centers for Federal Aviation Administration education materials and resources. The Resource Centers maintain and provide quantities of printed materials, videotapes, and computer educational software. Center personnel can also provide general information, conduct workshops, and make aviation-related presentations.

Gordon Hoff, Director Aviation Education Resource Center Minnesota DOT Office of Aeronautics Aviation Education Relations 222 East Plato Boulevard St. Paul, MN 55107-1618 (612) 297-7652

Julius Salinas, Aviation Director Aviation Education Resource Center Vermilion Community College 1900 East Camp Street Ely, MN 55731 (218) 365-7200

## ► Environmental Protection Agency (EPA)

### **EPA Regional Office**

This office takes part in a variety of environmental education programs for both teachers and students. Programs range from teacher workshops and student contests to in-school presentations. Information on environmental issues is also available through the Public Information Center located at the office.

Suzanne Saric, Environmental Education Coordinator Environmental Protection Agency 77 West Jackson Boulevard (PI-19J) Chicago, IL 60604 (312) 353-3209 / Fax: (312) 353-1155

## Minnesota Environmental Research Laboratory

In addition to teacher workshops, the laboratory provides environmental programs for students at various grade levels, curriculum materials, and science fairs. Laboratory tours may also be arranged.

Bob Drummond U.S. Environmental Protection Agency Environmental Research Laboratory 6201 Congdon Boulevard Duluth, MN 55804 (218) 702-5733

### The President's Environmental Youth Awards (PEYA) Program

Young people from each State are invited to participate in PEYA, a nationwide program



designed to encourage individuals, school classes, summer camps, public interest groups, and youth organizations to promote environmental awareness and community involvement. The two components of the program are the regional certificate program and the National awards competition. Regional certificates, signed by the President, are awarded to each participant by EPA regional offices. National individual project winners, or one representative from a National awardwinning group project, along with one sponsor, are honored at EPA headquarters in Washington, DC. Interested K-12 individuals or groups may obtain application materials and contest rules by contacting the EPA Regional Office that serves their State. PEYA has been an ongoing project since it was created by the White House Office of Education and the EPA in 1971.

EPA Region 5 77 West Jackson Boulevard (PI-19J) Chicago, IL 60604 (800) 621-8431 / Fax: (312) 353-1155

### ▶ National Aeronautics and Space Administration (NASA)

### **NASA Educator Resource Center**

The center has NASA-related educational materials in various formats, including laserdiscs, CD-ROMs, videotapes, slides, audiotapes, publications, and teacher guides. Educators may preview or copy NASA materials upon request.

NASA Lewis Research Center Educator Resource Center 21000 Brookpark Road, MS 8-1 Cleveland, OH 44135-3191 (216) 433-2017

### **NASA Field Centers**

Each field center has an educational programs officer who is responsible for precollege education programs. In addition to administering National programs, the center offers programs and services to meet regional and local needs.

Jo Ann Charleston, Acting Chief Office of Educational Programs NASA Lewis Research Center 21000 Brookpark Road, MS 7-4 Cleveland, OH 44135-3191 (216) 433-2957

### **NASA** Regional Educator Resource Center (RERC)

To offer more educators the opportunity to visit the Educator Resource Center Network (ERCN), NASA forms partnerships with planetariums, universities, museums, and other nonprofit organizations to serve as RERCs. Teachers may preview or copy NASA materials upon request.

Mankato State University NASA Regional Educator Resource Center Department of Curriculum and Instruction MSU Box 52, PO Box 8400 Mankato, MN 56002-8400 (507) 389-5710 or 1516

St. Cloud State University Center for Information Media NASA Regional Educator Resource Center 720 4th Avenue, South St. Cloud, MN 56301 (612) 255-2062

### **Space Grant Consortium**

The Space Grant Consortium in each State consists of colleges, universities, industry, and other organizations that have an interest in aeronautics and space education. Each consortium receives NASA funds for use in implementing a balanced program of research, education, and public service.

Minnesota Space Grant Consortium University of Minnesota, Main Campus 107 Ackerman Hall 110 Union Street SE Minneapolis, MN 55455 (612) 625-9002

### Ohio

### **▶** Department of Agriculture (USDA)

#### 4-H State Leader

The State 4-H Youth Development Programs are administered by the Cooperative Extension Service at land-grant universities. State 4-H leaders coordinate outreach services and training to all county offices.

Dr. David Andrews, Acting Assistant Director and State Leader 4-H Youth Development The Ohio State University Agriculture Administration Building 2120 Fyffe Road Columbus, OH 43210-1084 (614) 292-6996 E-mail: andrews.12@osu.edu

### Ag in the Classroom State Leader

This program promotes increased understanding of agriculture and possible careers in the agricultural sciences. With National leadership provided by USDA, each State manages its own programs, with assistance from agribusiness, educational institutions, and government.

Judy Roush, Agriculture Awareness Council PO Box 479 Columbus, OH 43216-0479 (614) 249-2429 / Fax: (614) 644-5702

### **▶** Department of Commerce (DOC)

### National Sea Grant College Program, Operation Pathfinder

The program consists of two-week summer courses that present an introduction to oceanographic and coastal processes. Courses are available in six regions and are designed to enhance skills in science teaching.

Al Miller and Jim Lubner University of Wisconsin Wisconsin Sea Grant 1800 University Avenue Madison, WI 53705-4094 (608) 262-0644 / Fax: (608) 263-2063

### **Old Woman Creek National Estuarine Research Reserve**

The reserve offers teacher workshops on how to use the reserve as an outdoor laboratory. Reservations are required.

Linda Feix, Education Coordinator Old Woman Creek National Estuarine Research Reserve 2514 Cleveland Road, East Huron, OH 44839 (419) 433-4601 / Fax: (419) 433-2851

### **▶** Department of Defense (DoD)

### Wright Patterson Air Force Base Wright Laboratory

The laboratory offer a range of programs for both teachers and students, including the Wright State Engineering Precollege Program, which is a partnership among the Air Force, the private sector, and Wright State University. Programs are designed for educators and students within the Dayton area. In addition, the base houses the Air Force Museum.



Education Coordinator WL-DOOP Wright Patterson AFB, OH 45433 (513) 255-5573

## ► Department of Education (ED)

### Eisenhower National Clearinghouse for Mathematics and Science Education (ENC)

ENC provides K–12 teachers with a central source of information on mathematics and science curriculum materials. (See page vii for more information on ENC).

Len Simutis, Director
Eisenhower National Clearinghouse for
Mathematics and Science Education
The Ohio State University
1929 Kenny Road
Columbus, OH 43210-1079
(614) 292-7784 / Fax: (614) 292-2066
(800) 621-5785
E-mail: info@enc.org
WWW: http://www.enc.org

#### **Eisenhower State Coordinators**

Eisenhower State Coordinators administer the Eisenhower Professional Development Program State Formula grants. The program focuses on sustained and intensive high-quality professional development through inservice programs.

Clayton Corke and Regina A. Lukich Eisenhower Professional Development Program Ohio Department of Education 65 South Front Street, Room 611 Columbus, OH 43215-4183 (614) 752-9573 / Fax: (614) 728-3058

## **Eisenhower State Coordinators for Higher Education**

Eisenhower State Coordinators oversee the Eisenhower Professional Development State Formula Grants for the State Agency for Higher Education (SAHE). The program focuses on teacher enhancement through both inservice and preservice programs.

Marlene Rushay
Eisenhower Professional Development
Program
Ohio Board of Regents, 36th Floor
3600 State Office Tower
30 East Broad Street
Columbus, OH 43266-0417
(614) 752-9475 / Fax: (614) 466-5866

## ERIC Clearinghouse for Science, Mathematics, and Environmental Education

The Clearinghouse's mission is to facilitate improved teaching, learning, and research in science, mathematics, and environmental education through the active exchange of information and services. As a component of the Educational Resources Information Center (ERIC), the Clearinghouse collects, abstracts, and indexes materials for the ERIC database, the world's largest and most heavily used education-related information resource.

The database contains more than 850,000 records of reports, journal articles, instructional materials, and other items. It is accessible electronically through the Internet and at over 1,000 physical locations around the world. The Clearinghouse staff also serves educators at all levels by answering questions, providing training in use of the database, distributing educational materials electronically, disseminating practical information and documents to teachers and the general public, and developing publications used by teachers, parents, administrators, curriculum specialists, and others.

David Haury, Director
ERIC Clearinghouse for Science,
Mathematics, and Environmental Education
The Ohio State University
1929 Kenny Road
Columbus, OH 43210-1080
(614) 292-6717 or (800) 276-0462
E-mail: ericse@osu.edu
WWW: http://www.ericse.org/

### Midwest Consortium for Mathematics and Science Education

The Eisenhower Regional Consortium provides information and technical assistance to help States and school districts improve mathematics and science education.

Dr. Gilbert Valdez, Director Midwest Consortium for Mathematics and Science Education 1900 Spring Road, Suite 300 Oak Brook, IL 60521 (708) 571-4700 / Fax: (708) 571-4716 WWW: http://www.ncrel.org/msc/msc.htm

### North Central Regional Educational Laboratory (NCREL)

NCREL identifies effective teaching techniques and school improvement efforts within the region and shares this information with State and local educators.

Jeri Nowakowski, Executive Director NCREL 1900 Spring Road, Suite 300 Oak Brook, IL 60521 (708) 571-4700 / Fax: (708) 571-4716 WWW: http://www.ncrel.org/

## Northeast Regional Technology in Education Consortium (NetTech)

ED established the Regional Technology in Education Consortia (R\*TEC) program in the fall of 1995 to help States, districts, schools, adult literacy centers, and other educational institutions use advanced technology to support improved teaching and student achievement. R\*TEC's role in educational technology is unique in two ways: the emphasis is regional and the primary goal is to ensure that technology is used effectively to support school reform. Program strategies include professional development, technical assistance, and information dissemination.

Bonnie Brownstein and Michael Ribaudo, Co-Directors NetTech City University of New York 555 West 57th Street New York, NY 10019 (212) 541-0972 / Fax: (212) 541-0357 E-mail: blbbh@cunyvm.cuny.edu WWW: http://www.nettech.org

Kathy Fuller, R\*TEC Project Officer U.S. Department of Education Office of Educational Research and Improvement ORAD/SLSD, Room 506c 555 New Jersey Avenue NW Washington, DC 20208-5644 (202) 219-2281 E-mail: Kathy\_Fuller@ed.gov

## ► Department of Energy (DOE)

### Appalachian Regional Commission (ARC) and Oak Ridge National Laboratory (ORNL)

A summer science, mathematics, and technology Teacher Leadership Institute is available for secondary teachers to participate research-based programs at ORNL. The institute is provided in a two-week summer residential format patterned after the ORNL/National Science Foundation (NSF) National Teacher Enhancement Project and Leadership Institute. Participants are selected by the ARC from secondary schools throughout the ARC region.



BEST COPY AVAILABLE

The focus is on "hands-on" laboratory research applying the tools and methods used in ongoing ORNL projects in research areas (as appropriate for each teacher's teaching assignment), pedagogy, and leadership. The program will feature telecommunications instruction at the ORNL Regional Science Center; telecommunications will be the primary method used for academic year followup and continued interactions with the teachers. Participants in the Teacher Leadership Institute will be hosted by several ORNL research divisions based on each teacher's background and interests. A program coordinator with experience in teacher preparation/higher education delivers instruction in pedagogy and educational leadership.

ARC and ORNL also collaborate on a summer science, mathematics, and technology Summer Science Honors Academy for ARC students to participate in research-based programs at ORNL. Student participants (seniors or graduating seniors) will be selected by the ARC from secondary schools throughout the ARC region. Students will be teamed with research mentors to participate in "hands-on" laboratory research applying the tools and methods used in ongoing ORNL projects. Students will also receive telecommunications instruction at the ORNL Regional Science Center.

Terry L. Lashley, Education Partnerships
Team Leader
Oak Ridge National Laboratory
Office of University and Science Education
PO Box 2008
5500A, MS 6366
Oak Ridge, TN 37831-6366
(423) 574-0689 / Fax: (423) 241-6726
E-mail: TL7@ornl.gov

## Fernald Environmental Management Project

The project manages programs for both students and teachers. In addition, the project sponsors a speaker's bureau, academic competitions, and science fairs.

Sue Walpole Public Affairs Fernald Environmental Management Project PO Box 538704 Cincinnati, OH 45253-8704 (513) 648-4026 / Fax: (513) 648-4011 E-mail: susan\_walpole@fernald.gov

### ▶ Department of the Interior (DOI)

## **Bureau of Land Management Eastern States Office**

The Bureau of Land Management State

Office provides information about educational programs, materials, and local land-management issues.

Education Coordinator Bureau of Land Management 7450 Boston Boulevard Springfield, VA 22153 (703) 440-1713

### Cuyahoga Valley National Recreation Area

The Cuyahoga Valley Environmental Education Center is a new 132-bed facility serving school children from September to May. Students participate in a four-day program with multicultural and global emphasis. The curriculum, *A River Runs Through It*, blends issues, nature, and the arts into a complete tapestry. The curriculum starts with fourth through sixth grades and moves up to high school. Program teaching staff participate in a college internship. Weekend workshops for teachers are offered periodically.

A Day-Use Program includes two environmental education classes for area school groups interested in a day visit to the park. The two classes are called "At the Water's Edge" and "Among the Trees." The approach is hands-on, guided discovery.

James Bull, Environmental Education Program Manager Cuyahoga Valley Environmental Education Center Cuyahoga Valley NRA 15610 Vaughn Road Brecksville, OH 44141 (216) 657-2796 / Fax: (216) 657-2058

### Ottawa National Wildlife Refuge

Environmental education programs at the refuge include guided tours and teacher guides and workshops.

Outdoor Recreation Planner Ottawa National Wildlife Refuge 14000 West State Road, Route 2 Oak Harbor, OH 43449 (216) 898-0014 / Fax: (216) 898-7895

### Project WILD

Project WILD offers teacher training and educational materials. Teacher guides, free to teachers who attend the training session, contain more than 80 supplementary, interdisciplinary activities for grades K–12.

Paul Schiff, Project WILD Coordinator Ohio Division of Wildlife 1840 Belcher Drive, Fountain Square G-1 Columbus, OH 43224 (614) 265-6316 / Fax: (614) 262-1171

### ▶ Department of Labor (DOL)

## Job Training Partnership Act (JTPA) Liaison

The JTPA Liaison can provide information about the Job Training Partnership Act State and local programs for economically disadvantaged adults and youth.

Evelyn Bissonnette, Director Job Training Partnership-Ohio Division Ohio Bureau of Employment Services 145 South Front Street, Fourth Floor Columbus, OH 43215 (614) 466-3817 / Fax: (614) 752-6582

## ► Department of Transportation (DOT)

### Federal Aviation Administration (FAA) Aviation Education

The FAA Aviation Education Representative coordinates aviation education services, including materials and programs for the FAA in the States assigned to the region.

Programs include the following:

- The Aviation Career Education (ACE)
  Academy is a one-week summer aviation education program for high school students sponsored by the FAA along with a host educational institution. The program provides students with diverse experiences in aviation career exploration. The focus is on aviation career clusters identified by FAA, with an emphasis on opportunities for women and minorities. A goal is to have one program in each State and U.S. Territory. The FAA will conduct regional leadership workshops and provide funds based on the availability of resources.
- Aviation Education Workshops for Teachers provide teachers with information on FAA aviation programs and materials and prepare them to teach aviation in the classroom. Annual workshops are conducted at colleges and universities across the Nation. The FAA provides information, materials, and speakers for the program.
- National Congress on Aviation and Space Education is sponsored annually by the FAA in partnership with the National Aeronautics and Space Administration and the Civil Air Patrol. The meeting includes teacher workshops and crosstalk sessions to exchange ideas on promoting aerospace education.



Lee Carlson, AGL-11, FAA Aviation Education Representative O'Hare Lake Officer Center 2300 East Devon Avenue Des Plaines, IL 60018 (708) 294-7042 / Fax: (708) 294-7368

### FAA Aviation Education Resource Centers

Located at colleges, museums, and State aviation authority offices, these centers function as information distribution centers for Federal Aviation Administration education materials and resources. The Resource Centers maintain and provide quantities of printed materials, videotapes, and computer educational software. Center personnel can also provide general information, conduct workshops, and make aviation-related presentations.

Stephen M. Quilty, A.A.E Aviation Education Resource Center Bowling Green State University Aerotechnology Program Technology Annex Bowling Green, OH 43403-0307 (419) 372-8926

## ► Environmental Protection Agency (EPA)

## Center for Environmental Learning

The center coordinates environmental education programs for both the Risk Reduction and the Environmental Monitoring Systems Laboratories. It also sponsors environmental conferences and conventions, the development of curriculum materials, and a variety of programs for students in grades K–12.

Environmental Education Coordinator Center for Environmental Learning 26 West Martin Luther Avenue Cincinnati, OH 45268 (513) 569-7212 / Fax: (513) 569-7770

### **EPA Regional Office**

This office takes part in a variety of environmental education programs for both teachers and students. Programs range from teacher workshops and student contests to in-school presentations. Information on environmental issues is also available through the Public Information Center located at the office.

Suzanne Saric, Environmental Education Coordinator Environmental Protection Agency 77 West Jackson Boulevard (PI-19J) Chicago, IL 60604 (312) 353-3209 / Fax: (312) 353-1155

### The President's Environmental Youth Awards (PEYA) Program

Young people from each State are invited to participate in PEYA, a nationwide program designed to encourage individuals, school classes, summer camps, public interest groups, and youth organizations to promote environmental awareness and community involvement. The two components of the program are the regional certificate program and the National awards competition. Regional certificates, signed by the President, are awarded to each participant by EPA regional offices. National individual project winners, or one representative from a National awardwinning group project, along with one sponsor, are honored at EPA headquarters in Washington, DC. Interested K-12 individuals or groups may obtain application materials and contest rules by contacting the EPA Regional Office that serves their State. PEYA has been an ongoing project since it was created by the White House Office of Education and the EPA in 1971.

EPA Region 5 77 West Jackson Boulevard (PI-19J) Chicago, IL 60604 (800) 621-8431 / Fax: (312) 353-1155

# ► National Aeronautics and Space Administration (NASA)

### **NASA Educator Resource Center**

The center has NASA-related educational materials in various formats, including laserdiscs, CD-ROMs, videotapes, slides, audiotapes, publications, and teacher guides. Educators may preview or copy NASA materials upon request.

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### **NASA Field Centers**

Each field center has an educational programs officer who is responsible for precollege education programs. In addition to administering National programs, the center offers programs and services to meet regional and local needs.

Jo Ann Charleston, Acting Chief Office of Educational Programs NASA Lewis Research Center 21000 Brookpark Road, Mail Stop 7-4 Cleveland, OH 44135-3191 (216) 433-2957

### NASA Regional Educator Resource Center (RERC)

To offer more educators the opportunity to visit the Educator Resource Center Network (ERCN), NASA forms partnerships with planetariums, universities, museums, and other nonprofit organizations to serve as RERCs. Teachers may preview or copy NASA materials upon request.

University of Cincinnati NASA Regional Educator Resource Center Curriculum Resources Center Mail Location 0219 600 Blegen Library Cincinnati, OH 45221-0219 (513) 556-1430

### **Space Grant Consortium**

The Space Grant Consortium in each State consists of colleges, universities, industry, and other organizations that have an interest in aeronautics and space education. Each consortium receives NASA funds for use in implementing a balanced program of research, education, and public service.

Ohio Space Grant Consortium Ohio Aerospace Institute 22800 Cedar Point Road Brook Park, OH 44142 (216) 962-3020

### **Wisconsin**

### ▶ Department of Agriculture (USDA)

### 4-H State Leader

The State 4-H Youth Development Programs are administered by the Cooperative Extension Service at land-grant universities. State 4-H leaders coordinate outreach services and training to all county offices.

Dr. David Running, State 4-H Program Leader University of Wisconsin 610 Langdon Street, 328 Lowell Hall Madison, WI 53703 (608) 263-1095 / Fax: (608) 262-9166

### Ag in the Classroom State Leader

This program promotes increased understanding of agriculture and possible careers in the agricultural sciences. With National leadership provided by USDA, each State manages its own programs, with assistance from



agribusiness, educational institutions, and government.

Bob Leege Wisconsin Farm Bureau 7010 Mineral Point Road Madison, WI 53705 (608) 836-5575

## **▶** Department of Commerce (DOC)

### National Sea Grant College Program, Operation Pathfinder

The program consists of two-week summer courses that present an introduction to oceanographic and coastal processes. Courses are available in six regions and are designed to enhance skills in science teaching.

Al Miller and Jim Lubner University of Wisconsin Wisconsin Sea Grant 1800 University Avenue Madison, WI 53705-4094 (608) 262-0644 / Fax: (608) 263-2063

### ▶ Department of Education (ED)

#### **Eisenhower State Coordinators**

Eisenhower State Coordinators administer the Eisenhower Professional Development Program State Formula grants. The program focuses on sustained and intensive high-quality professional development through inservice programs.

Dr. John C. Bell
Eisenhower Professional Development
Program
Department of Public Instruction
125 South Webster Street, PO Box 7841
Madison, WI 53707-7841
(608) 267-9270 / Fax: (608) 267-1052

## **Eisenhower State Coordinators** for Higher Education

Eisenhower State Coordinators oversee the Eisenhower Professional Development State Formula Grants for the State Agency for Higher Education (SAHE). The program focuses on teacher enhancement through both inservice and preservice programs.

Dr. Gary Britton Eisenhower Professional Development Program University of Wisconsin Center 400 University Drive West Bend, WI 53095 (414) 335-5227 / Fax: (414) 335-5220

### Midwest Consortium for Mathematics and Science Education

The Eisenhower Regional Consortium provides information and technical assistance to help States and school districts improve mathematics and science education.

Dr. Gilbert Valdez, Director Midwest Consortium for Mathematics and Science Education 1900 Spring Road, Suite 300 Oak Brook, IL 60521 (708) 571-4700 / Fax: (708) 571-4716 WWW: http://www.ncrel.org/msc/msc.htm

## North Central Regional Educational Laboratory (NCREL)

NCREL identifies effective teaching techniques and school improvement efforts within the region and shares this information with State and local educators.

Jeri Nowakowski, Executive Director NCREL 1900 Spring Road, Suite 300 Oak Brook, IL 60521 (708) 571-4700 / Fax: (708) 571-4716 WWW: http://www.ncrel.org/

### North Central Regional Technology in Education Consortium (NCRTEC)

ED established the Regional Technology in Education (R\*TEC) program in the fall of 1995 to help States, districts, schools, adult literacy centers, and other educational institutions use advanced technology to support improved teaching and student achievement. R\*TEC's role in educational technology is unique in two ways: the emphasis is regional and the primary goal is to ensure that technology is used effectively to support school reform. Program strategies include professional development, technical assistance, and information dissemination.

Randy Knuth, Director NCRTEC North Central Regional Educational Laboratory 1900 North Spring Road, Suite 300 Oak Brook, IL 60521-1480 (630) 571-4710 / Fax: (630) 218-4989 E-mail: rknuth@ncrel.org WWW: http://www.ncrtec.org/ Catherine Mozer Conner, R\*TEC Program Officer
U.S. Department of Education
Office of Educational Research and Improvement
ORAD/SLSD, Room 506a
555 New Jersey Avenue NW
Washington, DC 20208-5644
(202) 219-8070
E-mail: cconnor@inet.ed.gov

## ► Department of the Interior (DOI)

### Apostle Islands National Lakeshore

Apostle Island School is a joint venture with the park, Northland College, and the Sigurd Olson Environmental Institute. It provides environmental education for fourth, fifth, and sixth grade children in northern Wisconsin. The program includes pre-visit classroom instruction and either a day trip or a three-day overnight experience in the park, led by rangers and environmental education students from Northland College. Some 600 children, 25 teachers, and 16 student teachers are involved with the program.

Kayci Cook, Chief of Interpretation Apostle Islands National Lakeshore Route 1 Box 4 Bayfield, WI 54814 (715) 779-3397

### Bureau of Land Management Eastern States Office

The office provides information about educational programs, materials, and local land-management issues.

Education Coordinator Bureau of Land Management 7450 Boston Boulevard Springfield, VA 22153 (703) 440-1713

#### **Project WILD**

Project WILD offers teacher training and educational materials. Teacher guides, free to teachers who attend the training session, contain more than 80 supplementary, interdisciplinary activities for grades K-12.

Valeri Humphrey, Project WILD Coordinator Wisconsin Department of Natural Resources Box 7921 Madison, WI 53707 (608) 266-0870 / Fax: (608) 264-6293



### St. Croix National Scenic Riverway

Rivers Are Alive is a two-part program. Part I, "Web of Life," presented at the school, introduces habitats and interdependence. Part II, "Let's Go Mucking," is a hands-on introduction to plants and animals in and near the river. The students wade into the river with small nets and catch, examine, and release aquatic life. Group discussion of biodiversity, water quality, and waterway protection follows.

Terrence O'Halloran, Nameicagon District Interpreter St. Croix National Scenic Riverway Box 100 Trego, WI 54888 (715) 635-8346 / Fax: (715) 635-8823

### ▶ Department of Labor (DOL)

### Job Training Partnership Act (JTPA) Liaison

The JTPA Liaison can provide information about the Job Training Partnership Act State and local programs for economically disadvantaged adults and youth.

June Suhling, Administrator Division of Employment and Training Policy (DETP)

Wisconsin Department of Industry, Labor, and Human Relations 201 East Washington Avenue Madison, WI 53707 (608) 266-2439 / Fax: (608) 267-2392

## ► Department of Transportation (DOT)

## Federal Aviation Administration (FAA) Aviation Education

The FAA Aviation Education Representative coordinates aviation education services, including materials and programs for the FAA in the States assigned to the region.

Programs include the following:

▶ The Aviation Career Education (ACE)
Academy is a one-week summer aviation
education program for high school students
sponsored by the FAA along with a host
educational institution. The program provides students with diverse experiences in
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aviation career clusters identified by FAA,
with an emphasis on opportunities for
women and minorities. A goal is to have
one program in each State and U.S.
Territory. The FAA will conduct regional

leadership workshops and provide funds based on the availability of resources.

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Lee Carlson, AGL-11, FAA Aviation Education Representative O'Hare Lake Officer Center 2300 East Devon Avenue Des Plaines, IL 60018 (708) 294-7042 / Fax: (708) 294-7368

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Chuck Larsen
EAA Aviation Center
Aviation Education Resource Center
Experimental Aircraft Association
3000 Poberezny Road
Oshkosh, WI 54903-3065
(414) 426-4800

Michael J. Wallschlaeger, Chairman Aviation Education Resource Center University of Wisconsin at Superior Division of Education 1800 Grand Avenue Superior, WI 54880-2898 (715) 394-8309

Duane Esse Aviation Education Resource Center DOT Bureau of Aeronautics PO Box 7914, 4802 Sheboygan Avenue Madison, WI 53707-7914 (608) 266-3351

## ► Environmental Protection Agency (EPA)

### **EPA Regional Office**

This office takes part in a variety of environmental education programs for both teachers and students. Programs range from teacher workshops and student contests to in-school presentations. Information on environmental issues is also available through the Public Information Center located at the office.

Suzanne Saric, Environmental Education Coordinator Environmental Protection Agency 77 West Jackson Boulevard (PI-19J) Chicago, IL 60604 (312) 353-3209 / Fax: (312) 353-1155

### The President's Environmental Youth Awards (PEYA) Program

Young people from each State are invited to participate in PEYA, a nationwide program designed to encourage individuals, school classes, summer camps, public interest groups, and youth organizations to promote environmental awareness and community involvement. The two components of the program are the regional certificate program and the National awards competition. Regional certificates, signed by the President, are awarded to each participant by EPA regional offices. National individual project winners, or one representative from a National awardwinning group project, along with one sponsor, are honored at EPA headquarters in Washington, DC. Interested K-12 individuals or groups may obtain application materials and contest rules by contacting the EPA Regional Office that serves their State. PEYA has been an ongoing project since it was created by the White House Office of Education and the EPA in 1971.

EPA Region 5 77 West Jackson Boulevard (PI-19J) Chicago, IL 60604 (800) 621-8431 / Fax: (312) 353-1155

# ► National Aeronautics and Space Administration (NASA)

#### **NASA Educator Resource Center**

The center has NASA-related educational materials in various formats, including laserdiscs, CD-ROMs, videotapes, slides, audiotapes, publications, and teacher guides. Educators may preview or copy NASA materials upon request.



NASA Lewis Research Center Educator Resource Center 21000 Brookpark Road, MS 8-1 Cleveland, OH 44135-3191 (216) 433-2017

#### **NASA Field Centers**

Each field center has an educational programs officer who is responsible for precollege education programs. In addition to administering National programs, the center offers programs and services to meet regional and local needs.

Jo Ann Charleston, Acting Chief Office of Educational Programs NASA Lewis Research Center 21000 Brookpark Road, MS 7-4 Cleveland, OH 44135-3191 (216) 433-2957

### NASA Regional Educator Resource Center (RERC)

To offer more educators the opportunity to visit the Educator Resource Center Network (ERCN), NASA forms partnerships with planetariums, universities, museums, and other nonprofit organizations to serve as RERCs. Teachers may preview or copy NASA materials upon request.

University of Wisconsin at LaCrosse NASA Regional Educator Resource Center Murphy Library LaCrosse, WI 54601 (608) 785-8148/8650

### **Space Grant Consortium**

The Space Grant Consortium in each State consists of colleges, universities, industry, and other organizations that have an interest in aeronautics and space education. Each consortium receives NASA funds for use in implementing a balanced program of research, education, and public service.

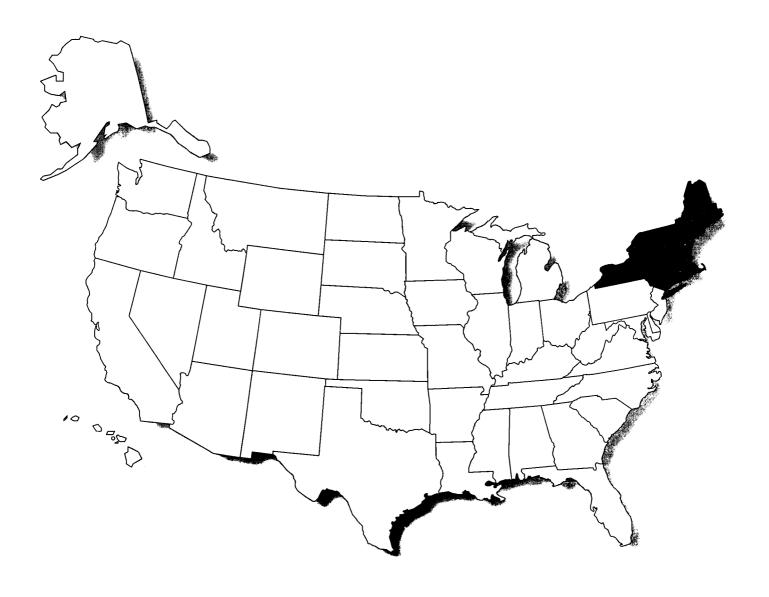
Wisconsin Space Grant Consortium University of Wisconsin at Milwaukee 333 Architecture and Urban Planning Building 2131 East Hartford Avenue Milwaukee, WI 53201-0413 (414) 229-3878



- **▶** Connecticut
- **▶** Maine
- **▶** Massachusetts
- ▶ New Hampshire
- ► New York
- ▶ Puerto Rico
- ▶ Rhode Island
- **▶ Vermont**
- ▶ Virgin Islands

Eisenhower Regional Alliance for Mathematics and Science Education Reform

Northeast and Islands





## Fisenhower Regional Alliance for Mathematics and Science Education Reform

he Eisenhower Regional Alliance for Mathematics and Science Education Reform is one of 10 Eisenhower Mathematics and Science Consortia established by the U.S. Department of Education. The National Network of Eisenhower Regional Consortia and the Eisenhower National Clearinghouse for Mathematics and Science Education form a coordinated, field-based National infrastructure to promote systemic educational reform. The Alliance is managed by the Technical Education Research Centers (TERC), a nonprofit education research and development organization based in Cambridge, Massachusetts and dedicated to improving mathematics and science learning.

The Alliance's goal is to provide professional development, technical assistance, information dissemination, and other services to strengthen the efforts of State and local mathematics and science education reform leaders. Three principles guide the work of the Alliance:

- ► The Alliance should make it easier for educators to collaborate regionally in addressing significant mathematics, science and technology (MST) reform issues.
- Clients of the Alliance should be involved in the process of setting priorities for Alliance services.
- Alliance services should be directed toward helping local educators access the necessary resources to meet their reform needs.

These principles have led to the formation of four collaborative structures: Statewide Action Teams, Regional Networks, Alliance Schools, and Electronic Services.

#### **Statewide Action Teams**

Each State or Island has a team of MST reform leaders who work with the Alliance to identify local and State priorities for MST reform services and activities. Team members are drawn from within the State or Island and include K–12 educators, higher education faculty, Statewide Systemic Initiative (SSI) leaders, State Eisenhower coordinators, State mathematics and science supervisors, science center directors, and teacher association lead-

ers. The teams support their local Alliance Schools; disseminate valuable information to the K–16 MST community; encourage participation in Alliance-sponsored institutes, pilots, and other initiatives; and foster increased statewide collaboration among diverse MST reform efforts. An 18-member Advisory Board, consisting of two representatives per State team, establishes regional priorities for resource allocation, ensures coordination across the region, and advises the Alliance staff.

### **Regional Networks**

To promote region-wide collaboration, the Alliance has four regional reform networks of local and State educators. These networks address key aspects of MST reform: equity, K-16 collaboration, curriculum/instruction/assessment, and public engagement. Each network has a dual mission: (1) to extend expertise related to the given network's topic as widely as possible across the region, and (2) to make this expertise easily, affordably, and equitably accessible, especially to teachers and their students. Network services include an open e-mail listserv, professional development institutes, sustained technical assistance, pilot projects, Web-based information, and newsletters. Network membership is free and open to anyone interested. Each network is led by a steering committee that is responsible for setting priorities for Alliance initiatives across the region, developing services for Alliance Schools and network members, expanding network membership, and disseminating network-related information and resources.

The focus of the Curriculum/Instruction/Assessment Network has been to support the implementation of State frameworks and standards-based curriculum, and to provide leadership training to State and local educators. The Equity Network will hold a regional institute to train a cadre of trainers who will assist school districts across the region to develop strong, data driven, local evaluation systems to inform their decision-making. The K–16 Network has provided extensive support for the development of State-based K–16 networks and cross-State collaboration on K–16 reform. The Public Engagement Network has brought representatives from

many of the States together to share strategies, materials, and information about efforts to communicate with and engage the public more closely in math and science reform. In addition, the Alliance is working with the National Network of Eisenhower Regional Consortia on the development of a searchable National database of Informal Science Centers and has established a new Informal Education Network to enable museum and other informal science educators to share their work across the region.

#### **Alliance Schools**

The Alliance has launched a regionwide "Alliance Schools" initiative, a network of K-12 schools committed to systemic reform efforts and sustained partnerships with State and local leaders in MST education. In the first phase, 37 schools were selected by the Regional Alliance's State teams. Alliance Schools represent a cross-section of grade levels, demographics, and experience with MST reform; however, schools enrolling substantial numbers of underserved populations represent a majority of the school sites. Alliance School Partners include representatives of the region's State Systemic Initiatives (SSIs), leaders of the major State MST organizations, professional development specialists, museum and science center educators, and faculty from colleges and universities. The goals of the partnerships are to build capacity in each school to support comprehensive MST reform and to develop a model for replicating and expanding the number of partnerships across the region.

Each Alliance School has a local plan for MST reform, and the Regional Alliance supports an array of professional development and technical assistance opportunities based on the local plans and common issues and concerns across the schools. Schools that did not have e-mail and Internet access received a school account. The Alliance uses its electronic networks to connect the schools to each other, their State partners, the Alliance staff, and the wider educational community. Each school has been provided with a World Wide Web site where faculty and students can publish information and share ideas about curriculum and programs. During the summer, the Alliance hosts an Alliance



Schools Institute, where school teams and their State partners meet for three days to further develop their professional community, their local MST plans, and their technical skills

#### **Electronic Services**

The Alliance information, communication, and dissemination efforts are supported by The Hub, its electronic network http://www.ra.terc.edu. The Hub provides Web access to a wide range of resources and services, including listservs and discussion groups; statewide action team and regional network information; Alliance Schools Web sites; and an extensive collection of online resources, MST documents, and links to valuable MST Web sites.

The Alliance also publishes two newsletters. *Alliance Access* provides information about key issues in MST reform, Alliance activities, and resources in math, science and technology. *MST Under Construction* is the newsletter for the Alliance Schools Network. These newsletters are free to interested educators and also can be found on The Hub.

In the fall of 1997, the Alliance will publish a *Systemic Reform Handbook* that will support local educators as they plan their MST reform efforts. The *Handbook* will provide vignettes of effective strategies regarding issues in MST reform, describe how educators can link with others in the region who are undertaking these reforms, and point readers to excellent information and resources available elsewhere in print and via Internet.

Mark Kaufman,

Director

Dr. Robert McLaughlin,

Co-Director

Jeanne Harmon,

Alliance Schools Coordinator

Eisenhower Regional Alliance for Mathematics and Science Education Reform

TERC

2067 Massachusetts Avenue Cambridge, MA 02140

(617) 547-0430 / Fax (617) 349-3535

E-mail: mark\_kaufman@terc.edu bob\_mclaughlin@terc.edu

jeanne\_harmon@terc.edu WWW: http://www.ra.terc.edu

### Connecticut

## ► Department of Agriculture (USDA)

#### 4-H State Leader

The State 4-H Youth Development Programs are administered by the Cooperative Extension Service at land-grant universities. State 4-H leaders coordinate outreach services and training to all county offices.

Nancy L. Wilhelm, Program Coordinator, 4-H University of Connecticut 1376 Storrs Road, Box U-36 Storrs, CT 06269-4036 (860) 486-4127 / Fax: (860) 486-4128 E-mail: nwilhelm@cnr1.cag.uconn.edu

### Ag in the Classroom State Leader

This program promotes increased understanding of agriculture and possible careers in the agricultural sciences. With National leadership provided by USDA, each State manages its own programs, with assistance from agribusiness, educational institutions, and government.

Bernadet Kayan 510 Pigeon Hill Road Windsor, CT 06095 (203) 683-1922

Dr. Alfred Mannebach University of Connecticut 249 Glenbrook Road Storrs, CT 06269-2093 (203) 486-0246

### ▶ Department of Commerce (DOC)

### National Sea Grant College Program, Operation Pathfinder

The program consists of two-week summer courses that present an introduction to oceanographic and coastal processes. Courses are available in six regions and are designed to enhance skills in science teaching.

Sharon Meeker New Hampshire-Maine Sea Grant Kingman Farm University of New Hampshire Durham, NH 03824-3512 (603) 749-1565 / Fax: (603) 743-3997

## ► Department of Defense (DoD)

## Nautilus Memorial/Submarine Force Library and Museum

This facility displays the evolution of submarine development from the Revolutionary War to modern submarine class. Visitors can tour *Nautilus*, the world's first nuclear powered submarine. Reservations are requested for groups of 20 or more. Admission and parking are free.

Submarine Force Museum Submarine Base New London Groton, CT 06349-5571 (860) 449-3558 / (800) 343-0079

### Naval Submarine Base, New London

The base participates in the Navy Community Service Program through formation of partnerships with schools and other youth organizations throughout Connecticut, Maine, Massachusetts, New Hampshire, New Jersey Rhode Island, and Vermont.

COMSUBGRU TWO Commander, Submarine Group Two Naval Submarine Base, New London Box 100 Groton, CT 06349-5100 (860) 449-2232

## ► Department of Education (ED)

## The Eisenhower Regional Alliance for Mathematics and Science Education Reform

The Eisenhower Regional Consortium provides information and technical assistance to help States and school districts improve mathematics and science education.

Mark Kaufman and Bob McLaughlin, Co-Directors Eisenhower Regional Alliance for

Mathematics and Science Education Reform TERC

2067 Massachusetts Avenue Cambridge, MA 02140 (617) 547-0430 / Fax: (617) 349-3535 WWW: http://www.ra.terc.edu

#### Eisenhower State Coordinators

Eisenhower State Coordinators administer the Eisenhower Professional Development Program State Formula grants. The program focuses on sustained and intensive high-



quality professional development through inservice programs.

James Dargati
Eisenhower Professional Development
Program
Connecticut Department of Education
PO Box 2219
Hartford, CT 06145
(203) 566-6619 / Fax: (203) 566-5623

### **Eisenhower State Coordinators** for Higher Education

Eisenhower State Coordinators oversee the Eisenhower Professional Development State Formula Grants for the State Agency for Higher Education (SAHE). The program focuses on teacher enhancement through both inservice and preservice programs.

Connie Fraser, Director Legislative Services Eisenhower Professional Development Program Connecticut Department of Higher Education 61 Woodland Street Hartford, CT 06105 (203) 566-3640 / Fax: (203) 566-7865

### Northeast Regional Technology in Education Consortium (NetTech)

ED established the Regional Technology in Education Consortia (R\*TEC) program in the fall of 1995 to help States, districts, schools, adult literacy centers, and other educational institutions use advanced technology to support improved teaching and student achievement. R\*TEC's role in educational technology is unique in two ways: the emphasis is regional and the primary goal is to ensure that technology is used effectively to support school reform. Program strategies include professional development, technical assistance, and information dissemination.

Bonnie Brownstein and Michael Ribaudo, Co-Directors NetTech City University of New York 555 West 57th Street New York, NY 10019 (212) 541-0972 / Fax: (212) 541-0357 E-mail: blbbh@cunyvm.cuny.edu WWW: http://www.nettech.org/

Kathy Fuller, R\*TEC Project Officer U.S. Department of Education Office of Educational Research and Improvement ORAD/SLSD, Room 506c 555 New Jersey Avenue NW Washington, DC 20208-5644 (202) 219-2281 E-mail: Kathy\_Fuller@ed.gov

### Northeast and Islands Regional Educational Laboratory at Brown University (LAB)

LAB identifies effective teaching techniques and school improvement efforts within the region and shares this information with State and local educators.

Dr. Phil Zarlengo, Executive Director 222 Richmond Street, Suite 300 Providence, RI 02903-4226 (800) 521-9550 (401) 274-9548 / Fax (401) 421-7650 WWW: http://www.vlab.brown.edu/

## ► Department of the Interior (DOI)

### Bureau of Land Management Eastern States Office

This office provides information about educational programs, materials, and local land-management issues.

Education Coordinator Bureau of Land Management 7450 Boston Boulevard Springfield, VA 22153 (703) 440-1713

## Minerals Management Service (MMS) Regional Office

The MMS Regional Office provides a range of educational services. Teacher inservice programs and classroom visitations may include supplemental materials. Availability may be limited, but arrangements may be made for duplication of some materials at minimal cost.

Office of Communications & Governmental Affairs

Education Coordinator Minerals Management Service 1849 C Street, NW; LMS4230 Washington, DC 20240-0001 (202) 208-3985 / Fax: (202) 208-3968

Offshore Minerals Management Technical Communications Service Minerals Management Service 381 Eldon Street, MS 4530 Herndon, VA 20170-4817 (703) 787-1080 / Fax: (703) 787-1186

#### **Project WILD**

Project WILD offers teacher training and educational materials. Teacher guides, free to teachers who attend the training session, contain more than 80 supplementary, interdisciplinary activities for grades K–12.

Diane A. Chisnall-Joy Environmental Curriculum Coordinator Department of Environmental Protection 79 Elm Street Hartford, CT 06106 (203) 424-3599 / Fax: (203) 566-7292

## ► Department of Labor (DOL)

## Job Training Partnership Act (JTPA) Liaison

The JTPA Liaison can provide information about the Job Training Partnership Act State and local programs for economically disadvantaged adults and youth.

John E. Saunders, Deputy Commissioner Connecticut State Department of Labor 200 Folly Brook Boulevard Wethersfield, CT 06109 (203) 566-4280 / Fax: (203) 566-1520

## ► Department of Transportation (DOT)

### Federal Aviation Administration (FAA) Aviation Education

The FAA Aviation Education Representative coordinates aviation education services, including materials and programs for the FAA in the States assigned to the region.

Programs include the following:

- The Aviation Career Education (ACE)
  Academy is a one-week summer aviation education program for high school students sponsored by the FAA along with a host educational institution. The program provides students with diverse experiences in aviation career exploration. The focus is on aviation career clusters identified by FAA, with an emphasis on opportunities for women and minorities. A goal is to have one program in each State and U.S. Territory. The FAA will conduct regional leadership workshops and provide funds based on the availability of resources.
- Aviation Education Workshops for Teachers provide teachers with information on FAA aviation programs and materials and prepare them to teach aviation in the classroom. Annual workshops are conducted at colleges and universities across the Nation. The FAA provides information, materials, and speakers for the program.
- ► National Congress on Aviation and Space Education is sponsored annually by the



FAA in partnership with the National Aeronautics and Space Administration and the Civil Air Patrol. The meeting includes teacher workshops and crosstalk sessions to exchange ideas on promoting aerospace education.

Robert Stepanek, Education Director Aviation Education Resource Center Connecticut DOT Bureau of Aviation and Ports New England Air Museum Bradley International Airport Winsor, CT 06096 (203) 623-3305

Vivian Manzione, Assistant Director Platt/Sikorsky School for Aviation Great Meadow Road Stratford, CT 06497 (203) 381-9250

## ► Environmental Protection Agency (EPA)

### **EPA** Regional Office

This office takes part in a variety of environmental education programs for both teachers and students. Programs range from teacher workshops and student contests to in-school presentations. Information on environmental issues is also available through the Public Information Center located at the office.

Maria Pirie, Environmental Education Coordinator Environmental Protection Agency JFK Federal Building (RPM) Boston, MA 02203 (617) 565-9447 / Fax: (617) 565-3415

## The President's Environmental Youth Awards (PEYA) Program

Young people from each State are invited to participate in PEYA, a nationwide program designed to encourage individuals, school classes, summer camps, public interest groups, and youth organizations to promote environmental awareness and community involvement. The two components of the program are the regional certificate program and the National awards competition. Regional certificates, signed by the President, are awarded to each participant by EPA regional offices. National individual project winners, or one representative from a National awardwinning group project, along with one sponsor, are honored at EPA headquarters in Washington, D.C. Interested K-12 individuals or groups may obtain application materials and contest rules by contacting the EPA Regional Office that serves their State. PEYA has been an ongoing project since it was created by the White House Office of Education and the EPA in 1971.

EPA Region 1 JFK Federal Building Boston, MA 02203 (617) 565-9447 / Fax: (617) 565-3415

# ► National Aeronautics and Space Administration (NASA)

#### **NASA Educator Resource Center**

The center has NASA-related educational materials in various formats, including laserdiscs, CD-ROMs, videotapes, slides, audiotapes, publications, and teacher guides. Educators may preview or copy NASA materials upon request.

Educator Resource Laboratory NASA Goddard Space Flight Center Mail Code 130.3 Greenbelt, MD 20771-0001 (301) 286-8570

#### **NASA Field Centers**

Each field center has an educational programs officer who is responsible for precollege education programs. In addition to administering National programs, the center offers programs and services to meet regional and local needs.

Education Programs NASA Goddard Space Flight Center Mail Code 130 Greenbelt, MD 20771-0001 (301) 286-7206

#### **Space Grant Consortium**

The Space Grant Consortium in each State consists of colleges, universities, industry, and other organizations that have an interest in aeronautics and space education. Each consortium receives NASA funds for use in implementing a balanced program of research, education, and public service.

Connecticut Space Grant Consortium University of Hartford 200 Bloomfield Avenue West Hartford, CT 06117 (203) 768-4849

## ► National Science Foundation (NSF)

## Statewide Systemic Initiatives (SSI) Program

Connecticut's SSI Program includes the Connecticut Academy for Education in Mathematics, Science, and Technology; curriculum revisions; collaboration among teacher education programs and science centers; public science literacy projects; and projects designed to involve businesses with school districts.

Richard Cole, Director Connecticut Academy 178 Cross Street Middletown, CT 06457 (203) 346-1177 / Fax: (203) 346-2157

### **Maine**

### ▶ Department of Agriculture (USDA)

#### 4-H State Leader

The State 4-H Youth Development Programs are administered by the Cooperative Extension Service at land-grant universities. State 4-H leaders coordinate outreach services and training to all county offices.

John Rebar, Program Administrator, 4-H 5741 Libby Hall, Room 103 University of Maine CES Orono, ME 04469-5741 (207) 581-3188 / Fax: (207) 581-1387 E-mail: jrebar@umce.umext.maine.edu

#### Ag in the Classroom State Leader

This program promotes increased understanding of agriculture and possible careers in the agricultural sciences. With National leadership provided by USDA, each State manages its own programs, with assistance from agribusiness, educational institutions, and government.

Buzz Gamble Department of Education Station #23 Augusta, ME 04222-0433 (207) 287-5899



### ▶ Department of Commerce (DOC)

### National Sea Grant College Program, Operation Pathfinder

The program consists of two-week summer courses that present an introduction to oceanographic and coastal processes. Courses are available in six regions and are designed to enhance skills in science teaching.

Sharon Meeker New Hampshire-Maine Sea Grant Kingman Farm University of New Hampshire Durham, NH 03824-3512 (603) 749-1565 / Fax: (603) 743-3997

### Wells National Estuarine Research Reserve

The reserve has an onsite program for fourth grade students, as well as a Junior Research summer program. Estuarine ecology curriculum materials for grades K–8 are also available. Reservations are required.

Henrietta List, Education Coordinator Wells National Estuarine Research Reserve 342 Laudhom Road Wells, ME 04090 (207) 646-1555 / Fax: (207) 646-2930

## ► Department of Defense (DoD)

#### Naval Air Station, Brunswick

The station participates in the Navy Community Service Program through formation of partnerships with schools and other youth organizations in the area.

NAS Brunswick Commanding Officer AIMD Box 1 Brunswick, ME 04011-5001 (207) 921-2493

## ► Department of Education (ED)

## The Eisenhower Regional Alliance for Mathematics and Science Education Reform

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help States and school districts improve mathematics and science education.

Mark Kaufman and Bob McLaughlin, Co-Directors Eisenhower Regional Alliance for Mathematics and Science Education Reform TERC 2067 Massachusetts Avenue

Cambridge, MA 02140 (617) 547-0430 / Fax: (617) 349-3535 WWW: http://www.ra.terc.edu

#### **Eisenhower State Coordinators**

Eisenhower State Coordinators administer the Eisenhower Professional Development Program State Formula grants. The program focuses on sustained and intensive high-quality professional development through inservice programs.

Thomas Keller
Eisenhower Professional Development
Program
Maine Department of Education
State House Station #23
Augusta, ME 04333
(207) 287-5925 / Fax: (207) 287-5927

## Eisenhower State Coordinators for Higher Education

Eisenhower State Coordinators oversee the Eisenhower Professional Development State Formula Grants for the State Agency for Higher Education (SAHE). The program focuses on teacher enhancement through both inservice and preservice programs.

Jacqueline P. Mitchell
Eisenhower Professional Development
Program
State Agency for Higher Education
Maine Department of Education
State House Station #23
Augusta, ME 04333
(207) 289-5937 / Fax: (207) 287-5927

## Northeast Regional Technology in Education Consortium (NetTech)

ED established the Regional Technology in Education Consortia (R\*TEC) program in the fall of 1995 to help States, districts, schools, adult literacy centers, and other educational institutions use advanced technology to support improved teaching and student achievement. R\*TEC's role in educational technology is unique in two ways: the emphasis is regional and the primary goal is to ensure that technology is used effectively to support school reform. Program strategies include professional development, technical assistance, and information dissemination.

Bonnie Brownstein and Michael Ribaudo, Co-Directors NetTech City University of New York 555 West 57th Street New York, NY 10019 (212) 541-0972 / Fax: (212) 541-0357 E-mail: blbbh@cunyvm.cuny.edu WWW: http://www.nettech.org/

Kathy Fuller, R\*TEC Project Officer U.S. Department of Education Office of Educational Research and Improvement ORAD/SLSD, Room 506c 555 New Jersey Avenue NW Washington, DC 20208-5644 (202) 219-2281 E-mail: Kathy\_Fuller@ed.gov

## Northeast and Islands Regional Educational Laboratory at Brown University (LAB)

LAB identifies effective teaching techniques and school improvement efforts within the region and shares this information with State and local educators.

Dr. Phil Zarlengo, Executive Director 222 Richmond Street, Suite 300 Providence, RI 02903-4226 (800) 521-9550 (401) 274-9548 / Fax (401) 421-7650 WWW: http://www.ylab.brown.edu/

## ► Department of the Interior (DOI)

### **Acadia National Park**

The park offers guided tours and nature walks, in addition to other selected environmental education activities.

Office of Interpretation Acadia National Park PO Box 177 Bar Harbor, ME 04609 (207) 288-5456

## **Bureau of Land Management Eastern States Office**

This office provides information about educational programs, materials, and local land-management issues.

Education Coordinator Bureau of Land Management 7450 Boston Boulevard Springfield, VA 22153 (703) 440-1713

### **BEST COPY AVAILABLE**



## Craig Brook National Fish Hatchery

The hatchery offers the program The Atlantic Salmon—Its Natural History and the USFWS Restoration Efforts in Maine.

Edward Peter Steenstra, Outdoor Recreational Planner Craig Brook NFH Hatchery Road East Orland, ME 04431 (207) 469-7300 / Fax: (207) 469-6847

### **Gulf of Maine Project**

The Wild Gulf provides teachers with tools to bring the Gulf of Maine into the classroom and help students develop a watershed-wide perspective about living resources. The Wild Gulf poster series and workbook provide basic information about the Gulf and suggest ideas for using the four posters. *The Almanac* is an annotated catalog covering an array of environmental subjects and providing a description of educational materials, facilities, and resources currently available to teachers and individuals.

Lois Winter, Outreach Specialist Gulf of Maine Project 4R Fundy Road Falmouth, ME 04105 (207) 781-8364 / Fax: (207) 781-8369 E-mail: r5es\_gomp@mail.fws.gov

## Minerals Management Service (MMS) Regional Office

The MMS Regional Office provides a range of educational services. Teacher inservice programs and classroom visitations may include supplemental materials. Availability may be limited, but arrangements may be made for duplication of some materials at minimal cost.

Offshore Minerals Management Technical Communications Service Minerals Management Service 381 Eldon Street, MS 4530 Herndon, VA 20170-4817 (703) 787-1080 / Fax: (703) 787-1186

Office of Communications & Governmental Affairs Education Coordinator Minerals Management Service 1849 C Street NW; LMS4230 Washington, DC 20240-0001

Moosehorn National Wildlife Preserve

(202) 208-3985 / Fax: (202) 208-3968

Programs at the preserve include guided nature tours and in-class presentations. Curriculum materials are available upon request.

Public Use Specialist Moosehorn National Wildlife Preserve PO Box 1077 Calsis. ME 04619

(207) 454-3521 / Fax: (207) 454-2550

### **Project WILD**

Project WILD offers teacher training and educational materials. Teacher guides, free to teachers who attend the training session, contain more than 80 supplementary, interdisciplinary activities for grades K–12.

Lisa Kane, Project WILD Coordinator Maine Department of Inland Fisheries 284 State Street Augusta, ME 04333 (207) 289-3303 / Fax: (207) 287-6395

## Rachel Carson National Wildlife Refuge

Outdoor Environmental Education is a residential program. The basic curriculum is made up of forest, freshwater, astronomy, bioscope, marine bioscope, ocean, and coastal zone management. Several optional outdoor classes all include field exercises.

Graham W. Taylor, Refuge Operations Specialist Rachel Carson NWR RR2, Box 751 Wells, ME 04090 (207) 646-9226 / Fax: (207) 646-6554 E-mail: r5rw\_rcnwr@mail.fws.gov

## ► Department of Labor (DOL)

## Job Training Partnership Act (JTPA) Liaison

The JTPA Liaison can provide information about the Job Training Partnership Act State and local programs for economically disadvantaged adults and youth.

Charles A. Morrison, Commissioner Maine Department of Labor 20 Union Street, PO Box 309 Augusta, ME 04330 (207) 289-3788 / Fax: (207) 289-5292

## ► Department of Transportation (DOT)

### Federal Aviation Administration (FAA) Aviation Education

The FAA Aviation Education Representative coordinates aviation education services,

including materials and programs for the FAA in the States assigned to the region.

Programs include the following:

- The Aviation Career Education (ACE)
  Academy is a one-week summer aviation
  education program for high school students sponsored by the FAA along with a
  host educational institution. The program
  provides students with diverse experiences
  in aviation career exploration. The focus
  is on aviation career clusters identified by
  FAA, with an emphasis on opportunities
  for women and minorities. A goal is to
  have one program in each State and U.S.
  Territory. The FAA will conduct regional
  leadership workshops and provide funds
  based on the availability of resources.
- ► Aviation Education Workshops for Teachers provide teachers with information on FAA aviation programs and materials and prepare them to teach aviation in the classroom. Annual workshops are conducted at colleges and universities across the Nation. The FAA provides information, materials, and speakers for the program.
- ▶ National Congress on Aviation and Space Education is sponsored annually by the FAA in partnership with the National Aeronautics and Space Administration and the Civil Air Patrol. The meeting includes teacher workshops and crosstalk sessions to exchange ideas on promoting aerospace education.

Sheila Bauer, ANE-45, FAA Aviation Education Representative 12 New England Executive Park Burlington, MA 01803 (617) 238-7378 / Fax: (617) 238-7007

### FAA Aviation Education Resource

Located at colleges, museums, and State aviation authority offices, these centers function as information distribution centers for Federal Aviation Administration education materials and resources. The Resource Centers maintain and provide quantities of printed materials, videotapes, and computer educational software. Center personnel can also provide general information, conduct workshops, and make aviation-related presentations.

Sue Doner Aviation Education Resource Center Kennebec Valley Technical College 92 Western Avenue Fairfield, ME 04937-0020 (207) 453-9762



Sara Jane Poli Aviation Education Resource Center Biddeford School Department Maplewood Avenue Biddeford, ME 04005 (207) 282-8280

Mark Sanborn, Assistant Director Aviation Education Resource Center Penobscot Nation Tribal Administration Vocational Training and Education 6 River Road, Community Building Indian Island, ME 04468 (207) 827-7776

Timothy D. Crowley, Dean of Students Aviation Education Resource Center Northern Maine Technical Center 33 Edgemont Drive Presque Isle, ME 04769 (207) 769-2461

## ► Environmental Protection Agency (EPA)

### **EPA** Regional Office

This office takes part in a variety of environmental education programs for both teachers and students. Programs range from teacher workshops and student contests to in-school presentations. Information on environmental issues is also available through the Public Information Center located at the office.

Maria Pirie, Environmental Education Coordinator Environmental Protection Agency JFK Federal Building (RPM) Boston, MA 02203 (617) 565-9447 / Fax: (617) 565-3415

## The President's Environmental Youth Awards (PEYA) Program

Young people from each State are invited to participate in PEYA, a nationwide program designed to encourage individuals, school classes, summer camps, public interest groups, and youth organizations to promote environmental awareness and community involvement. The two components of the program are the regional certificate program and the National awards competition. Regional certificates, signed by the President, are awarded to each participant by EPA regional offices. National individual project winners, or one representative from a National awardwinning group project, along with one sponsor, are honored at EPA headquarters in Washington, DC. Interested K-12 individuals or groups may obtain application materials and contest rules by contacting the EPA Regional Office that serves their State. PEYA has been an ongoing project since it was created by the White House Office of Education and the EPA in 1971.

EPA Region 1 JFK Federal Building Boston, MA 02203 (617) 565-9447 / Fax: (617) 565-3415

### ► National Aeronautics and Space Administration (NASA)

#### **NASA Educator Resource Center**

The center has NASA-related educational materials in various formats, including laserdiscs, CD-ROMs, videotapes, slides, audiotapes, publications, and teacher guides. Educators may preview or copy NASA materials upon request.

Educator Resource Laboratory NASA Goddard Space Flight Center Mail Code 130.3 Greenbelt, MD 20771-0001 (301) 286-8570

#### **NASA Field Centers**

Each field center has an educational programs officer who is responsible for precollege education programs. In addition to administering National programs, the center offers programs and services to meet regional and local needs.

Education Programs NASA Goddard Space Flight Center Mail Code 130 Greenbelt, MD 20771-0001 (301) 286-7206

### **Space Grant Consortium**

The Space Grant Consortium in each State consists of colleges, universities, industry, and other organizations that have an interest in aeronautics and space education. Each consortium receives NASA funds for use in implementing a balanced program of research, education, and public service.

Maine Space Grant Consortium Maine Science and Technology Commission 87 Winthrop Street Augusta, ME 04330 (207) 621-6350

## ► National Science Foundation (NSF)

### Statewide Systemic Initiatives (SSI) Program

The primary focus of Maine's SSI Program is on curriculum changes, teacher preparation and enhancement, the alignment of curriculum with assessment, and the establishment of "beacon" lab schools to test new curriculum and teaching methods. In addition, "beacon colleges" will reform teacher preparation. This initiative also includes community awareness programs, progressive institutes and workshops for teachers, and the increased use of technology.

Jacqueline P. Mitchell Maine Department of Education Augusta, ME 04333-5359 (207) 287-5937 / Fax: (207) 287-5927 E-mail: jmitchell@ssi.edc.org

#### Director

Maine Mathematics and Science Alliance Maine Department of Education Augusta, ME 04332-5359 (207) 287-5881 / Fax: (207) 287-5885

### **Massachusetts**

## ►Department of Agriculture (USDA)

#### 4-H State Leader

The State 4-H Youth Development Programs are administered by the Cooperative Extension Service at land-grant universities. State 4-H leaders coordinate outreach services and training to all county offices.

Thomas M. Waskiewicz, 4-H Program Coordinator Youth Development University of Massachusetts 214 Stockbridge Hall Amherst, MA 01003 (413) 545-2646 / Fax: (413) 545-1002 E-mail: thomasw@umext.umass.edu

### Ag in the Classroom State Leader

This program promotes increased understanding of agriculture and possible careers in the agricultural sciences. With National leadership provided by USDA, each State manages its own programs, with assistance from



agribusiness, educational institutions, and government.

Deborah C. Hogan c/o PO Box 1171 Lakeville, MA 02347 (508) 336-4426

## ► Department of Commerce (DOC)

### National Sea Grant College Program, Operation Pathfinder

The program consists of two-week summer courses that present an introduction to oceanographic and coastal processes. Courses are available in six regions and are designed to enhance skills in science teaching.

Sharon Meeker New Hampshire-Maine Sea Grant Kingman Farm University of New Hampshire Durham, NH 03824-3512 (603) 749-1565 / Fax: (603) 743-3997

## Stellwagen Bank National Marine Sanctuary

This recently designated marine sanctuary is developing educational programs involving environmental science.

Ann Smrcina, Education Coordinator Stellwagen Bank National Marine Sanctuary 14 Union Street Plymouth, MA 02360 (508) 747-1691 / Fax: (508) 747-1949

### Waquoit Bay National Estuarine Research Reserve

The reserve offers intern programs, interpretive walks, and watershed curriculum.

Joan Muller, Education Coordinator Waquoit Bay National Estuarine Research Reserve 149 Waquoit Highway, PO Box 3092 Waquoit, MA 02536 (508) 457-0495 / Fax: (508) 727-5537

## ► Department of Defense (DoD)

## Science and Engineering Apprentice Program

This program, supported by DoD and administered by The George Washington

University, is designed to provide research experience for high school students attending school near this participating research facility. Each student works with a senior scientist or engineer who acts as a mentor for eight weeks during the summer.

Marilyn Joy U.S. Army Soldier Systems Command Attn: AMSSC-SDP Natick, MA 01760-5013 (508) 233-5089

## U.S. Army Natick Research, Development, and Engineering Center

The center offers informal internships and mentoring activities to students in a variety of disciplines. Center staff also participate in the U.S. Army High School Science and Mathematics Faculty Summer Research Program administered by the Army Research Office.

U.S. Army Natick Research, Development, and Engineering Center Kansas Street Natick, MA 01760-5000 (508) 233-4300

## ► Department of Education (ED)

## The Eisenhower Regional Alliance for Mathematics and Science Education Reform

The Eisenhower Regional Consortium provides information and technical assistance to help States and school districts improve mathematics and science education.

Mark Kaufman and Bob McLaughlin, Co-Directors Eisenhower Regional Alliance for Mathematics and Science Education Reform TERC 2067 Massachusetts Avenue Cambridge, MA 02140 (617) 547-0430 / Fax: (617) 349-3535 WWW: http://www.ra.terc.edu

#### **Eisenhower State Coordinators**

Eisenhower State Coordinators administer the Eisenhower Professional Development Program State Formula grants. The program focuses on sustained and intensive high-quality professional development through inservice programs.

Neil Davidson, Executive Director Division School Programs Eisenhower Professional Development Program Massachusetts Department of Education 350 Main Street Malden, MA 02148-5023 (617) 338-3300, ext. 248 Fax: (617) 308-3395

### Eisenhower State Coordinators for Higher Education

Eisenhower State Coordinators oversee the Eisenhower Professional Development State Formula Grants for the State Agency for Higher Education (SAHE). The program focuses on teacher enhancement through both inservice and preservice programs.

Lynette Robinson-Weening
Eisenhower Professional Development
Program
Massachusetts Higher Education
Coordinating Council
McCormack Building, Room 1401
One Ashburton Place
Boston, MA 02108-1696
(617) 727-7785, ext. 246
Fax: (617) 727-6397

### Northeast Regional Technology in Education Consortium (NetTech)

ED established the Regional Technology in Education Consortia (R\*TEC) program in the fall of 1995 to help States, districts, schools, adult literacy centers, and other educational institutions use advanced technology to support improved teaching and student achievement. R\*TEC's role in educational technology is unique in two ways: the emphasis is regional and the primary goal is to ensure that technology is used effectively to support school reform. Program strategies include professional development, technical assistance, and information dissemination.

Bonnie Brownstein and Michael Ribaudo, Co-Directors NetTech City University of New York 555 West 57th Street New York, NY 10019 (212) 541-0972 / Fax: (212) 541-0357 E-mail: blbbh@cunyvm.cuny.edu WWW: http://www.nettech.org/

Kathy Fuller, R\*TEC Project Officer U.S. Department of Education Office of Educational Research and Improvement ORAD/SLSD, Room 506c 555 New Jersey Avenue NW Washington, DC 20208-5644 (202) 219-2281 E-mail: Kathy\_Fuller@ed.gov



### Northeast and Islands Regional Educational Laboratory at Brown University (LAB)

LAB identifies effective teaching techniques and school improvement efforts within the region and shares this information with State and local educators.

Dr. Phil Zarlengo, Executive Director 222 Richmond Street, Suite 300 Providence, RI 02903-4226 (800) 521-9550 (401) 274-9548 / Fax (401) 421-7650 WWW: http://www.vlab.brown.edu/

### ▶Department of Energy (DOE)

#### **Bates Linear Accelerator Center**

The center supports nuclear and particle physics experiments by researchers from approximately 40 educational institutions. It has recently added continuous beam capability.

Wade Sapp, Principal Research Scientist Bates Linear Accelerator Center PO Box 846 Middleton, MA 01949 (617) 253-9519 / Fax: (617) 253-9599 E-mail: sapp@bates.mit.edu

## ► Department of the Interior (DOI)

## **Bureau of Land Management Eastern States Office**

This office provides information about educational programs, materials, and local land-management issues.

Education Coordinator Bureau of Land Management 7450 Boston Boulevard Springfield, VA 22153 (703) 440-1713

### Cape Cod National Seashore

The seashore offers a residential environmental education program for students. Curriculum materials and other onsite activities are available upon request.

Division of Interpretation Cape Cod National Seashore South Wellsfleet, MA 02663 (508) 349-3785

#### **Cronin National Salmon Station**

The Atlantic Salmon Restoration program consists of staff visiting schools and showing slides, giving demonstrations, or conducting class discussions on Atlantic salmon. Visits are also made to the hatchery to see and feed the fish and to learn about salmon life and restoration efforts. This program is adaptable to a large variety of groups.

Bernard M. Novak, Jr., Hatchery Manager Cronin National Salmon Station 51 East Plumtree Road Sunderland, MA 01375 (413) 548-9010 / Fax: (413) 548-9628

## Great Meadows National Wildlife Refuge

The refuge operates a classroom laboratory for wetlands study. Teachers must complete a wetlands workshop prior to conducting a class in the laboratory.

Other programs include the following:

- ▶ National Wildlife Week, sponsored by the National Wildlife Federation, is held each April. Great Meadows National Wildlife Refuge serves as a distribution point for approximately 300 kits for school teachers in the area, mostly eastern Massachusetts. Each kit contains lesson plans for teachers, student pages, and promotional materials on the theme selected by the NWF each year.
- ➤ The Wetlands Teacher Workshop is a one-day workshop introducing teachers and youth group leaders to the biology of pond and freshwater marsh habitats of the Refuge; the onsite classroom laboratory and its use; and equipment available to teachers for their self-guided onsite environmental education programs. Film, handouts, discussion, and hands-on pond sampling and microscopic investigation techniques are used.

Janet Kennedy, Outdoor Recreation Planner Great Meadows NWR Weir Hill Road Sudbury, MA 01776 (508) 443-4661 / Fax: (508) 443-2898 E-mail: r5rw\_gmnwr@mail.fws.gov

## Minerals Management Service (MMS) Regional Office

The MMS Regional Office provides a range of educational services. Teacher inservice programs and classroom visitations may include supplemental materials. Availability may be limited, but arrangements may be made for duplication of some materials at minimal cost.

Offshore Minerals Management Technical Communications Service Minerals Management Service 381 Eldon Street, MS 4530 Herndon, VA 20170-4817 (703) 787-1080 / Fax: (703) 787-1186

Office of Communications & Governmental Affairs Education Coordinator Minerals Management Service 1849 C Street NW; LMS4230 Washington, DC 20240-0001 (202) 208-3985 / Fax: (202) 208-3968

### Monomoy National Wildlife Refuge

Cultural and Natural History Tours of South Monomoy Island operate through a cooperative agreement with the U.S. Fish and Wildlife Service and the Cape Cod Museum of Natural History. The program offers cultural and natural history tours of South Monomoy Island and includes the use of the historical Monomoy Lighthouse as a base of operations. Day and overnight trips are offered.

Internships in refuge management, wildlife management, biology, and public use management are available during the summer months. Undergraduate students and those planning to enter graduate school participate in field activities related to the above-mentioned disciplines, working alongside refuge staff and independently. Internships are tailored to meet student and refuge needs. Generally, one or two internships are conducted each year.

Sharon Ware, Refuge Operations Specialist Monomoy NWR Wikis Way Chatham, MA 02633 (508) 945-0594 / Fax: (508) 945-9559 E-mail: r5rw\_mnwr@mail.fws.gov

#### **Project WILD**

Project WILD offers teacher training and educational materials. Teacher guides, free to teachers who attend the training session, contain more than 80 supplementary, interdisciplinary activities for grades K–12.

Marion Larson, Project WILD Co-Coordinator Division of Fisheries and Wildlife Route 135 Westboro, MA 01581 (508) 792-7270 / Fax: (508) 792-7275

Cleti Cervoni, Project WILD Co-Coordinator Massachusetts Audubon Society South Great Road Lincoln, MA 01773-1460 (617) 259-9506, ext. 7252 Fax: (617) 259-8899



### Saugus Iron Works, National Historic Site

In the program A Colonial Iron Works, students are introduced to 17th century iron-making. Students participate in a "hunt" to find the natural resources used in ironmaking. Then they are taken through the process and the end result, such as an iron tool or nail. Pre- and post-visit materials and resource boxes are available.

Frank M. Studinski, Chief Interpretation and Visitor Service Saugus Iron Works, NHS 244 Central Street Saugus, MA 01906 (617) 233-0050 / Fax: (617) 231-9012

## ► Department of Labor (DOL)

### Job Training Partnership Act (JTPA) Liaison

The JTPA Liaison can provide information about the Job Training Partnership Act State and local programs for economically disadvantaged adults and youth.

Nils L. Nordberg, Commissioner Massachusetts Department of Employment and Training Charles F. Hurley Building Government Center, 19 Staniford Street Boston, MA 02114 (617) 727-6600 / Fax: (617) 727-0315

## ► Department of Transportation (DOT)

## Federal Aviation Administration (FAA) Aviation Education

The FAA Aviation Education Representative coordinates aviation education services, including materials and programs for the FAA in the States assigned to the region.

Programs include the following:

▶ The Aviation Career Education (ACE)
Academy is a one-week summer aviation
education program for high school students sponsored by the FAA along with a
host educational institution. The program
provides students with diverse experiences
in aviation career exploration. The focus
is on aviation career clusters identified by
FAA, with an emphasis on opportunities
for women and minorities. A goal is to
have one program in each State and U.S.
Territory. The FAA will conduct regional
leadership workshops and provide funds
based on the availability of resources.

- ▶ Aviation Education Workshops for Teachers provide teachers with information on FAA aviation programs and materials and prepare them to teach aviation in the classroom. Annual workshops are conducted at colleges and universities across the Nation. The FAA provides information, materials, and speakers for the program.
- ▶ National Congress on Aviation and Space Education is sponsored annually by the FAA in partnership with the National Aeronautics and Space Administration and the Civil Air Patrol. The meeting includes teacher workshops and crosstalk sessions to exchange ideas on promoting aerospace education.

Sheila Bauer, ANE-45, FAA Aviation Education Representative 12 New England Executive Park Burlington, MA 01803 (617) 238-7378 / Fax: (617) 238-7007

### FAA Aviation Education Resource Centers

Located at colleges, museums, and State aviation authority offices, these centers function as information distribution centers for Federal Aviation Administration education materials and resources. The Resource Centers maintain and provide quantities of printed materials, videotapes, and computer educational software. Center personnel can also provide general information, conduct workshops, and make aviation-related presentations.

Bill Annesley Aviation Education Resource Center Bridgewater State College Management Science and Aviation Science Department Bridgewater, MA 02325 (508) 697-1395

Dr. Robert Finklestein Aviation Education Resource Center North Shore Community College One Ferncroft Road Danvers, MA 01923 (508) 762-4000, ext. 6296

Dr. Nicholas Tzimopoulos, Director Aviation Education Resource Center Lexington Public School System Curriculum/Science Education 1557 Massachusetts Avenue Lexington, MA 02173 (617) 861-2484 Maureen McCartney, Director of Career Services Aviation Education Resource Center Westfield State College

Westfield State College Ely Campus Center, Western Avenue Westfield, MA 01086 (413) 568-3311, ext. 206

Dr. Toby Penstlen Aviation Education Resource Center Massachusetts Aeronautics Commission Transportation Library, 10 Park Plaza Boston, MA 02116-3966 (617) 973-8000

## ► Environmental Protection Agency (EPA)

### **EPA** Regional Office

This office takes part in a variety of environmental education programs for both teachers and students. Programs range from teacher workshops and student contests to in-school presentations. Information on environmental issues is also available through the Public Information Center located at the office.

Maria Pirie, Environmental Education Coordinator Environmental Protection Agency JFK Federal Building (RPM) Boston, MA 02203 (617) 565-9447 / Fax: (617) 565-3415

## The President's Environmental Youth Awards (PEYA) Program

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EPA Region 1 JFK Federal Building Boston, MA 02203 (617) 565-9447 / Fax: (617) 565-3415



# ► National Aeronautics and Space Administration (NASA)

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### **NASA Field Centers**

Each field center has an educational programs officer who is responsible for precollege education programs. In addition to administering National programs, the center offers programs and services to meet regional and local needs.

Education Programs NASA Goddard Space Flight Center Mail Code 130 Greenbelt, MD 20771-0001 (301) 286-7206

### NASA Regional Educator Resource Center (RERC)

To offer more educators the opportunity to visit the Educator Resource Center Network (ERCN), NASA forms partnerships with planetariums, universities, museums, and other nonprofit organizations to serve as RERCs. Teachers may preview or copy NASA materials upon request.

Bridgewater State College NASA Regional Educator Resource Center Office of Sponsored Projects Bridgewater, MA 02325 (508) 697-1242

### **Space Grant Consortium**

The Space Grant Consortium in each State consists of colleges, universities, industry, and other organizations that have an interest in aeronautics and space education. Each consortium receives NASA funds for use in implementing a balanced program of research, education, and public service.

Massachusetts Space Grant Consortium Massachusetts Institute of Technology Aeronautics and Astronautics 77 Massachusetts Avenue Building 37, Room 207 Cambridge, MA 02139 (617) 253-7759

## ► National Science Foundation (NSF)

### Statewide Systemic Initiatives (SSI) Program

The goals for the Massachusetts SSI Program include producing the State's first science and mathematics curriculum frameworks. Professional development opportunities are focused on reflective, inquiry-based teaching. Other initiatives include improving teacher preparation programs and establishing partnerships among schools, higher education institutions, businesses, parents, and the community.

David P. Driscoll Massachusetts Department of Education 350 Main Street Malden, MA 02148-5023 (617) 388-3300, ext. 103 Fax: (617) 388-3395 E-mail: ddriscoll@doe.mass.edu

### New Hampshire

### ▶ Department of Agriculture (USDA)

#### 4-H State Leader

The State 4-H Youth Development Programs are administered by the Cooperative Extension Service at land-grant universities. State 4-H leaders coordinate outreach services and training to all county offices.

Dr. Charlene Baxter, Program Leader 4-H and Youth Development University of New Hampshire 59 College Road, 119 Taylor Hall Durham, NH 03824 (603) 862-2161 / Fax: (603) 862-1585 E-mail: charlene.baxter@unh.edu

#### Ag in the Classroom State Leader

This program promotes increased understanding of agriculture and possible careers in the agricultural sciences. With National leadership provided by USDA, each State manages its own programs, with assistance from agribusiness, educational institutions, and government.

Lynne Blye Department of Agriculture Caller Box 2042 Concord, NH 03302 (603) 271-3696 / Fax: (603) 271-1109

## **▶** Department of Commerce (DOC)

### **Great Bay National Estuarine Research Reserve**

The reserve operates the Sandy Point Interpretive Center, which includes exhibits describing the human and natural histories of the Bay. Some programs are available for secondary students and teachers.

Betsy Franz, Education Coordinator Great Bay National Estuarine Research Reserve Sandy Point Discovery Center 89 Depot Road Stratham, NH 03885 (603) 778-0015 / Fax: (603) 778-7398

### National Sea Grant College Program, Operation Pathfinder

The program consists of two-week summer courses that present an introduction to oceanographic and coastal processes. Courses are available in six regions and are designed to enhance skills in science teaching.

Sharon Meeker New Hampshire-Maine Sea Grant Kingman Farm University of New Hampshire Durham, NH 03824-3512 (603) 749-1565 / Fax: (603) 743-3997

## ► Department of Defense (DoD)

## U.S. Army Cold Regions Research and Engineering Laboratory

The laboratory manages an apprenticeship program for juniors in local high schools. The program's purpose is to encourage continuation in mathematics, science, and engineering.

Audrey Vaughan
Office of Human Resources
Cold Regions Research and Engineering
Laboratory
72 Lyme Road
Hanover, NH 03755-1290
(603) 646-4645



**BEST COPY AVAILABLE** 

### ▶ Department of Education (ED)

## The Eisenhower Regional Alliance for Mathematics and Science Education Reform

The Eisenhower Regional Consortium provides information and technical assistance to help States and school districts improve mathematics and science education.

Mark Kaufman and Bob McLaughlin, Co-Directors Eisenhower Regional Alliance for Mathematics and Science Education Reform TERC 2067 Massachusetts Avenue Cambridge, MA 02140 (617) 547-0430 / Fax: (617) 349-3535 WWW: http://www.ra.terc.edu

#### **Eisenhower State Coordinators**

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Edward J. Hendry Eisenhower Professional Development Program New Hampshire Department of Education 101 Pleasant Street Concord, NH 03301 (603) 271-2632 / Fax: (603) 271-1953

## Eisenhower State Coordinators for Higher Education

Eisenhower State Coordinators oversee the Eisenhower Professional Development State Formula Grants for the State Agency for Higher Education (SAHE). The program focuses on teacher enhancement through both inservice and preservice programs.

Edward J. Hendry
Eisenhower Professional Development
Program
New Hampshire Department of Education
101 Pleasant Street
Concord, NH 03301
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### Northeast Regional Technology in Education Consortium (NetTech)

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Kathy Fuller, R\*TEC Project Officer U.S. Department of Education Office of Educational Research and Improvement ORAD/SLSD, Room 506c 555 New Jersey Avenue NW Washington, DC 20208-5644 (202) 219-2281 E-mail: Kathy\_Fuller@ed.gov

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### ▶ Department of the Interior (DOI)

## **Bureau of Land Management Eastern States Office**

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Office of Communications & Governmental Affairs
Education Coordinator
Minerals Management Service

Minerals Management Service 1849 C Street NW; LMS4230 Washington, DC 20240-0001 (202) 208-3985 / Fax: (202) 208-3968

Offshore Minerals Management Technical Communications Service Minerals Management Service 381 Eldon Street, MS 4530 Herndon, VA 20170-4817 (703) 787-1080 / Fax: (703) 787-1186

### **Project WILD**

Project WILD offers teacher training and educational materials. Teacher guides, free to teachers who attend the training session, contain more than 80 supplementary, interdisciplinary activities for grades K–12.

Judy Silverberg, Project WILD Coordinator New Hampshire Fish and Game Department Two Hazen Drive Concord, NH 03301 (603) 271-3212 / Fax: (603) 271-1438

### ▶ Department of Labor (DOL)

### Job Training Partnership Act (JTPA) Liaison

The JTPA Liaison can provide information about the Job Training Partnership Act State and local programs for economically disadvantaged adults and youth.

Ray O. Worden, Executive Director New Hampshire Job Training Coordinating Council 64B Old Suncook Road Concord, NH 03301 (603) 228-9500 / Fax: (603) 228-8557

## ► Department of Transportation (DOT)

### Federal Aviation Administration (FAA) Aviation Education

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Ronald Wanner
Aviation Education Resource Center
New Hampshire DOT Division of
Aeronautics
65 Airport Road, Concord Municipal Airport
Concord, NH 03301-5298
(603) 271-2551

Hanna McCarthy, President Aviation Education Resource Center Daniel Webster College 20 University Drive Nashua, NH 03063-1699 (603) 883-3556

## ► Environmental Protection Agency (EPA)

### **EPA** Regional Office

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Education Programs NASA Goddard Space Flight Center Mail Code 130 Greenbelt, MD 20771-0001 (301) 286-7206

### **Space Grant Consortium**

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New Hampshire Space Grant Consortium Institute for the Study of Earth, Oceans, and Space University of New Hampshire, Morse Hall Durham, NH 03824-3525 (603) 862-0094

### New York

### ▶ Department of Agriculture (USDA)

#### 4-H State Leader

The State 4-H Youth Development Programs are administered by the Cooperative



Extension Service at land-grant universities. State 4-H leaders coordinate outreach services and training to all county offices.

Dr. Ron Jones, State 4-H Program Leader 4-H Youth Development, Cornell University Roberts Hall, Room 354 Ithaca, NY 14853-4203 (607) 255-2233 / Fax: (607) 255-0788 E-mail: rjones@cce.cornell.edu

### Ag in the Classroom State Leader

This program promotes increased understanding of agriculture and possible careers in the agricultural sciences. With National leadership provided by USDA, each State manages its own programs, with assistance from agribusiness, educational institutions, and government.

Andrew Fagan Cornell University 408 Kennedy Hall Ithaca, NY 14853-5901 (607) 255-8122 / Fax: (607) 255-7905

## ► Department of Commerce (DOC)

### Hudson River National Estuarine Research Reserve

The reserve offers professional development workshops for educators and operates an Educational Resource Library. The reserve also has onsite and outreach interpretive programs.

Dennis Mildner, Education Coordinator Hudson River National Estuarine Research Reserve

New York State Department of Environmental Conservation c/o Bard College Field Station Annandale-On-Hudson, NY 12504 (914) 758-5193 / Fax: (914) 758-5192

### National Sea Grant College Program, Operation Pathfinder

The program consists of two-week summer courses that present an introduction to oceanographic and coastal processes. Courses are available in six regions and are designed to enhance skills in science teaching.

Sharon Meeker New Hampshire-Maine Sea Grant Kingman Farm University of New Hampshire Durham, NH 03824-3512 (603) 749-1565 / Fax: (603) 743-3997

## ► Department of Education (ED)

## The Eisenhower Regional Alliance for Mathematics and Science Education Reform

The Eisenhower Regional Consortium provides information and technical assistance to help States and school districts improve mathematics and science education.

Mark Kaufman and Bob McLaughlin, Co-Directors Eisenhower Regional Alliance for Mathematics and Science Education Reform

2067 Massachusetts Avenue Cambridge, MA 02140 (617) 547-0430 / Fax: (617) 349-3535 WWW: http://www.ra.terc.edu

TERC

### **Eisenhower State Coordinators**

Eisenhower State Coordinators administer the Eisenhower Professional Development Program State Formula grants. The program focuses on sustained and intensive high-quality professional development through inservice programs.

Laurie A. Rowe
Eisenhower Professional Development
Program
New York Education Department
Room 979 EBA
Albany, NY 12234
(518) 473-1388 / Fax: (518) 486-7336
E-mail: lrowe@inet.ed.gov

### Eisenhower State Coordinators for Higher Education

Eisenhower State Coordinators oversee the Eisenhower Professional Development State Formula Grants for the State Agency for Higher Education (SAHE). The program focuses on teacher enhancement through both inservice and preservice programs.

Yvonne Lovell
Eisenhower Professional Development
Program
New York State Education Department
Empire State Plaza
Cultural Education Center, Room 5064
Albany, NY 12230

(518) 486-6042 / Fax: (518) 486-3239

## Northeast Regional Technology in Education Consortium (NetTech)

ED established the Regional Technology in Education Consortia (R\*TEC) program in the fall of 1995 to help States, districts, schools, adult literacy centers, and other educational institutions use advanced technology to support improved teaching and student achieve-

ment. R\*TEC's role in educational technology is unique in two ways: the emphasis is regional and the primary goal is to ensure that technology is used effectively to support school reform. Program strategies include professional development, technical assistance, and information dissemination.

Bonnie Brownstein and Michael Ribaudo, Co-Directors NetTech City University of New York 555 West 57th Street New York, NY 10019 (212) 541-0972 / Fax: (212) 541-0357 E-mail: blbbh@cunyvm.cuny.edu WWW: http://www.nettech.org/

Kathy Fuller, R\*TEC Project Officer U.S. Department of Education Office of Educational Research and Improvement ORAD/SLSD, Room 506c 555 New Jersey Avenue NW Washington, DC 20208-5644 (202) 219-2281 E-mail: Kathy\_Fuller@ed.gov

### Northeast and Islands Regional Educational Laboratory at Brown University (LAB)

LAB identifies effective teaching techniques and school improvement efforts within the region and shares this information with State and local educators.

Dr. Phil Zarlengo, Executive Director 222 Richmond Street, Suite 300 Providence, RI 02903-4226 (800) 521-9550 (401) 274-9548 / Fax (401) 421-7650 WWW: http://www.vlab.brown.edu/

### ▶ Department of Energy (DOE)

### Appalachian Regional Commission (ARC) and Oak Ridge National Laboratory (ORNL)

A summer science, mathematics, and technology Teacher Leadership Institute is available for secondary teachers to participate research-based programs at ORNL. The institute is provided in a two-week summer residential format patterned after the ORNL/National Science Foundation (NSF) National Teacher Enhancement Project and Leadership Institute. Participants are selected by the ARC from secondary schools throughout the ARC region. The focus is on hands-on laboratory research applying the tools and methods used in ongoing ORNL projects in research



areas (as appropriate for each teacher's teaching assignment), pedagogy, and leadership. The program will feature telecommunications instruction at the ORNL Regional Science Center and telecommunications will be the primary method used for academic year follow-up and continued interactions with the teachers. Participants in the Teacher Leadership Institute will be hosted by several ORNL research divisions based on each teacher's background and interests. A program coordinator with experience in teacher preparation/higher education delivers instruction in pedagogy and educational leadership.

ARC and ORNL also collaborate on a summer science, mathematics, and technology Summer Science Honors Academy for ARC students to participate in research-based programs at ORNL. Student participants (seniors or graduating seniors) will be selected by the ARC from secondary schools throughout the ARC region. Students will be teamed with research mentors to participate in hands-on laboratory research applying the tools and methods used in ongoing ORNL projects. Students will also receive telecommunications instruction at the ORNL Regional Science Center.

Terry L. Lashley, Education Partnerships Team Leader Oak Ridge National Laboratory Office of University and Science Education PO Box 2008, Building 5500A, MS 6366 Oak Ridge, TN 37831-6366 (423) 574-0689 / Fax: (423) 241-6726 E-mail: TL7@ornl.gov

#### **Brookhaven National Laboratory**

The laboratory provides teacher workshops, student and faculty research apprenticeships, outreach, and onsite programs.

Karl Swyler, Head Educational Programs Brookhaven National Laboratory 14 Brookhaven Avenue, Building 438 PO Box 5000 Upton, NY 11973-5000 (516) 344-7171 / Fax: (516) 344-5832 E-mail: swyler@bnl.gov

#### Department of the Interior (DOI)

### **Bureau of Land Management Eastern States Office**

This office provides information about educational programs, materials, and local land-management issues.

Education Coordinator Bureau of Land Management 7450 Boston Boulevard Springfield, VA 22153 (703) 440-1713

#### Fire Island National Seashore

Programs include guided nature walks, teacher workshops, and a Junior Ranger Program. A teacher guide that emphasizes the geology, history, ecology, and zoology of Fire Island is available.

Division of Interpretation Fire Island National Seashore 120 Laurel Street Patchogue, NY 11772 (516) 289-4810

### Gateway National Recreation Area

Programs are primarily for grades four through six, although programs can be arranged for other grade levels. Teachers must attend a one-day seminar about the park prior to bringing their students.

Division of Interpretation Gateway National Recreation Area Building 69, Floyd Bennett Field Brooklyn, NY 11234 (718) 338-4376

#### Iroquois National Wildlife Refuge

Teacher workshops and guided tours are offered to promote environmental education. In the School Field Trip Program, teachers may schedule a one- or two-hour program during their visit, including: 1) an hour indoors with an orientation slide show or other AV program selected from the refuge library, and 2) an hour outdoors on an interpretive walk on a nature trail or visit to a wildlife overlook. Programs can be modified to coincide with specific classroom studies.

Project WILD and Project WET (Aquatic WILD) Teacher Workshops are supplementary environmental education programs emphasizing Wildlife In Learning Design. Teachers and youth educators learn new teaching ideas for use in the classroom or in youth-oriented programs including scouts and recreation centers. Participants receive activity guides and other teaching materials that can be used to supplement the curriculum.

Two sessions of the State Waterfowl Identification class are conducted each fall. Slides, videotapes, and lectures help participants learn how to identify common waterfowl species. Hunter ethics, ballistics, and wildlife laws pertaining to hunting are also covered. Participants must pass a written test to receive a certification card.

Dorothy Gerhart, Outdoor Recreation Planner Iroquois NWR Casey Road, PO Box 517-1101 Alabama, NY 14003 (716) 948-5445 / Fax: (716) 948-9538 E-mail: r5rw\_irqnwr@mail.fws.gov

### Long Island National Wildlife Refuge

Teacher workshops promote environmental education, curriculum materials, and various interpretation programs for students.

Outdoor Recreation Planner Long Island National Wildlife Refuge Complex PO Box 21 Shirley, NY 11967 (516) 286-0485 / Fax: (516) 286-4003

### Montezuma National Wildlife Refuge

The refuge has a video library, environmental education activities, curriculum materials, and guided nature tours.

Outdoor Recreation Planner Montezuma National Wildlife Refuge 3395 Route 5/20 East Seneca Falls, NY 13148 (315) 568-5987 / Fax: (315) 568-8835

#### **Project WILD**

Project WILD offers teacher training and educational materials. Teacher guides, free to teachers who attend the training session, contain more than 80 supplementary, interdisciplinary activities for grades K–12.

Frank Knight New York Department of Environmental Conservation 50 Wolf Road, Room 504 Albany, NY 12233 (518) 457-3720 / Fax: (518) 547-0855

## ► Department of Labor (DOL)

### Job Training Partnership Act (ITPA) Liaison

The JTPA Liaison can provide information about the Job Training Partnership Act State and local programs for economically disadvantaged adults and youth.

John F. Hudacs, Commissioner New York State Department of Labor State Office Building Campus Building 12, Room 500 Albany, NY 12240 (518) 457-2741 / Fax: (518) 457-6908



## ► Department of Transportation (DOT)

### Federal Aviation Administration (FAA) Aviation Education

The FAA Aviation Education Representative coordinates aviation education services, including materials and programs for the FAA in the States assigned to the region.

Programs include the following:

- ▶ The Aviation Career Education (ACE)
  Academy is a one-week summer aviation
  education program for high school students sponsored by the FAA along with a
  host educational institution. The program
  provides students with diverse experiences
  in aviation career exploration. The focus
  is on aviation career clusters identified by
  FAA, with an emphasis on opportunities
  for women and minorities. A goal is to
  have one program in each State and U.S.
  Territory. The FAA will conduct regional
  leadership workshops and provide funds
  based on the availability of resources.
- ▶ Aviation Education Workshops for Teachers provide teachers with information on FAA aviation programs and materials and prepare them to teach aviation in the classroom. Annual workshops are conducted at colleges and universities across the Nation. The FAA provides information, materials, and speakers for the program.
- National Congress on Aviation and Space Education is sponsored annually by the FAA in partnership with the National Aeronautics and Space Administration and the Civil Air Patrol. The meeting includes teacher workshops and crosstalk sessions to exchange ideas on promoting aerospace education.

Jim Szakary, AEA-61, FAA Aviation Education Representative JFK International Airport Federal Building, #111 Jamaica, NY 11430 (718) 553-3364 / Fax: (718) 553-1455

### FAA Aviation Education Resource Centers

Located at colleges, museums, and State aviation authority offices, these centers function as information distribution centers for Federal Aviation Administration education materials and resources. The Resource Centers maintain and provide quantities of printed materials, videotapes, and computer educational software. Center personnel can also provide general information, conduct workshops, and make aviation-related presentations.

Dr. Albert E. Donor, Provost and Executive Vice President Aviation Education Resource Center Dowling College Oakdale, NY 11769 (516) 244-3200

## ► Environmental Protection Agency (EPA)

#### **EPA** Regional Office

This office takes part in a variety of environmental education programs for both teachers and students. Programs range from teacher workshops and student contests to in-school presentations. Information on environmental issues is also available through the Public Information Center located at the office.

Terry Ippolito, Environmental Education Coordinator Environmental Protection Agency 290 Broadway, 26th Floor New York, NY 10007 (212) 637-3671 / Fax: (212) 637-4445

### The President's Environmental Youth Awards (PEYA) Program

Young people from each State are invited to participate in PEYA, a nationwide program designed to encourage individuals, school classes, summer camps, public interest groups, and youth organizations to promote environmental awareness and community involvement. The two components of the program are the regional certificate program and the National awards competition. Regional certificates, signed by the President, are awarded to each participant by EPA regional offices. National individual project winners, or one representative from a National awardwinning group project, along with one sponsor, are honored at EPA headquarters in Washington, DC. Interested K-12 individuals or groups may obtain application materials and contest rules by contacting the EPA Regional Office that serves their State. PEYA has been an ongoing project since it was created by the White House Office of Education and the EPA in 1971.

EPA Region 2 290 Broadway, 26th Floor New York, NY 10007 (212) 637-3678 / Fax: (212) 637-4445

# ► National Aeronautics and Space Administration (NASA)

#### **NASA Educator Resource Center**

The center has NASA-related educational materials in various formats, including laserdiscs, CD-ROMs, videotapes, slides, audiotapes, publications, and teacher guides. Educators may preview or copy NASA materials upon request.

Educator Resource Laboratory NASA Goddard Space Flight Center Mail Code 130.3 Greenbelt, MD 20771-0001 (301) 286-8570

#### **NASA Field Centers**

Each field center has an educational programs officer who is responsible for precollege education programs. In addition to administering National programs, the center offers programs and services to meet regional and local needs.

Education Programs NASA Goddard Space Flight Center Mail Code 130 Greenbelt, MD 20771-0001 (301) 286-7206

#### NASA Regional Educator Resource Center (RERC)

To offer more educators the opportunity to visit the Educator Resource Center Network (ERCN), NASA forms partnerships with planetariums, universities, museums, and other nonprofit organizations to serve as RERCs. Teachers may preview or copy NASA materials upon request.

The City College NASA Regional Educator Resource Center Harris Hall, Room 109 Convent Avenue at 138th Street New York, NY 10031 (212) 650-6993

#### **Space Grant Consortium**

The Space Grant Consortium in each State consists of colleges, universities, industry, and other organizations that have an interest in aeronautics and space education. Each consortium receives NASA funds for use in implementing a balanced program of research, education, and public service.

New York Space Grant Consortium Department of Astronomy Cornell University 318 Space Sciences Building Ithaca, NY 14853 (607) 255-8544



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## ► National Science Foundation (NSF)

### Statewide Systemic Initiatives (SSI) Program

The New York SSI Program's New Compact for Learning is a major reform in the State's six largest urban school districts: New York, Buffalo, Albany, Syracuse, Rochester, and Yonkers. Under this program, the districts develop or expand local partnerships. The State provides support through State field-based assistance teams, staff development efforts, and a school quality review program.

Edward Lalor State Education Department Washington Avenue Albany, NY 12234 (518) 473-9471 / Fax: (518) 473-0858

#### **Puerto Rico**

#### ▶ Department of Agriculture (USDA)

#### 4-H State Leader

The State 4-H Youth Development Programs are administered by the Cooperative Extension Service at land-grant universities. State 4-H leaders coordinate outreach services and training to all county offices.

Victor Rodriguez Vasquez, Acting State 4-H Leader

Cooperative Extension Service College Station Building C Mayaguez, PR 00708 (809) 832-4040 / Fax: (809) 865-3103

#### Ag in the Classroom State Leader

This program promotes increased understanding of agriculture and possible careers in the agricultural sciences. With National leadership provided by USDA, each State manages its own programs, with assistance from agribusiness, educational institutions, and government.

Dave Heilig USDA/SCS Caribbean Area State Office G.P.O. Box 4868 San Juan, PR 00936 (809) 498-5206

## ► Department of Commerce (DOC)

### Jobos Bay National Estuarine Research Reserve

The reserve offers interpretive exhibits, inschool presentations, and guided canoe trips. Reservations are required.

Clara Mojica, Education Coordinator Jobos Bay National Estuarine Research Reserve Call Box B Aguirre, PR 00704

(787) 853-4617 / Fax: (787) 853-4618

#### National Sea Grant College Program, Operation Pathfinder

The program consists of two-week summer courses that present an introduction to oceanographic and coastal processes. Courses are available in six regions and are designed to enhance skills in science teaching.

Sharon Walker Mississippi-Alabama Sea Grant Consortium and Gulf Coast Research Laboratory PO Box 7000 Ocean Springs, MS 39566-7000 (601) 374-5550 / Fax: (601) 374-5559

#### Department of Education (ED)

## The Eisenhower Regional Alliance for Mathematics and Science Education Reform

The Eisenhower Regional Consortium provides information and technical assistance to help States and school districts improve mathematics and science education.

Mark Kaufman and Bob McLaughlin, Co-Directors Eisenhower Regional Alliance for Mathematics and Science Education Reform TERC 2067 Massachusetts Avenue Cambridge, MA 02140 (617) 547-0430 / Fax: (617) 349-3535 WWW: http://www.ra.terc.edu

#### **Eisenhower State Coordinators**

Eisenhower State Coordinators administer the Eisenhower Professional Development Program State Formula grants. The program focuses on sustained and intensive high-quality professional development through inservice programs.

Acenet Bernacet
Eisenhower Professional Development
Program
PO Box 190759
San Juan, PR 00919-0759
(809) 753-9255 / Fax: (809) 758-3090

### **Eisenhower State Coordinators** for Higher Education

Eisenhower State Coordinators oversee the Eisenhower Professional Development State Formula Grants for the State Agency for Higher Education (SAHE). The program focuses on teacher enhancement through both inservice and preservice programs.

Delma Santiago
Eisenhower Professional Development
Program
Puerto Rico Council of Higher Education
PO Box 19900-1900, U.P.R. Station
Rio Piedras, PR 00910
(809) 724-7100, ext. 2056

#### Northeast and Islands Regional Educational Laboratory at Brown University (LAB)

LAB identifies effective teaching techniques and school improvement efforts within the region and shares this information with State and local educators.

Dr. Phil Zarlengo, Executive Director 222 Richmond Street, Suite 300 Providence, RI 02903-4226 (800) 521-9550 (401) 274-9548 / Fax (401) 421-7650 WWW: http://www.vlab.brown.edu/

## Southeast and Islands Regional Technology in Education Consortium (SEIR\*TEC)

ED established the Regional Technology in Education Consortia (R\*TEC) program in the fall of 1995 to help States, districts, schools, adult literacy centers, and other educational institutions use advanced technology to support improved teaching and student achievement. R\*TEC's role in educational technology is unique in two ways: the emphasis is regional and the primary goal is to ensure that technology is used effectively to support school reform. Program strategies include professional development, technical assistance, and information dissemination.

Don Holznagel, Director SEIR\*TEC 41 Marietta Street NW, Suite 1000 Atlanta, GA 30303 (800) 659-3204 (404) 893-0100 / Fax: (404) 577-7812 E-mail: dholznag@serve.org WWW: http://www.serve.org/seir-tec/



Deborah Williams, R\*TEC Project Officer U.S. Department of Education Office of Educational Research and Improvement ORAD/SLSD, Room 504f 555 New Jersey Avenue NW Washington, DC 20208-5644 (202) 219-2204 E-mail: Deborah\_Williams@ed.gov

## ► Department of the Interior (DOI)

#### **Project WILD**

Project WILD offers teacher training and educational materials. Teacher guides, free to teachers who attend the training session, contain more than 80 supplementary, interdisciplinary activities for grades K-12.

Aileen T. Velazco
Department of Natural and Environmental
Resources
PO Box 5887
Puerta de Tierra
San Juan, PR 00906
(809) 725-8619 / Fax: (809) 724-0365

#### Department of Labor (DOL)

### Job Training Partnership Act (JTPA) Liaison

The JTPA Liaison can provide information about the Job Training Partnership Act State and local programs for economically disadvantaged adults and youth.

Ardin Teron, President
Technological-Occupational Education
Council
431 Ponce de Leon, 16th Floor
Hato Rey, PR 00918
(809) 754-5633 / Fax: (809) 763-0195

#### ► Department of Transportation (DOT)

### Federal Aviation Administration (FAA) Aviation Education

The FAA Aviation Education Representative coordinates aviation education services, including materials and programs for the FAA in the States assigned to the region.

Programs include the following:

- The Aviation Career Education (ACE)
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George Burnette, ASO-17B.1, FAA Aviation Education Representative 1701 Columbia Avenue College Park, GA 30337 (404) 305-5350 / Fax: (404) 305-5312

## ► Environmental Protection Agency (EPA)

#### **EPA** Regional Office

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Terry Ippolito, Environmental Education Coordinator Environmental Protection Agency 290 Broadway, 26th Floor New York, NY 10007 (212) 637-3671 / Fax: (212) 637-4445

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participate in PEYA, a nationwide program designed to encourage individuals, school classes, summer camps, public interest groups, and youth organizations to promote environmental awareness and community involvement. The two components of the program are the regional certificate program and the National awards competition. Regional certificates, signed by the President, are awarded to each participant by EPA regional offices. National individual project winners, or one representative from a National awardwinning group project, along with one sponsor, are honored at EPA headquarters in Washington, DC. Interested K-12 individuals or groups may obtain application materials and contest rules by contacting the EPA Regional Office that serves their State. PEYA has been an ongoing project since it was created by the White House Office of Education and the EPA in 1971.

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# ► National Aeronautics and Space Administration (NASA)

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Educators Resources Center NASA John F. Kennedy Space Center Mail Code ERC Kennedy Space Center, FL 32899-0001 (407) 867-4090

#### **NASA Field Centers**

Each field center has an educational programs officer who is responsible for precollege education programs. In addition to administering National programs, the center offers programs and services to meet regional and local needs.

Steve Dutczak, Chief Education Services Branch NASA John F. Kennedy Space Center Mail Code PA-ESB Kennedy Space Center, FL 32899-0001 (407) 867-4444

#### **Space Grant Consortium**

The Space Grant Consortium in each State consists of colleges, universities, industry, and





other organizations that have an interest in aeronautics and space education. Each consortium receives NASA funds for use in implementing a balanced program of research, education, and public service.

Puerto Rico Space Grant Consortium University of Puerto Rico Resource Center for Science and Engineering PO Box 5000, College Station Mayaguez, PR 00681-5000 (809) 831-1022

## ► National Science Foundation (NSF)

### Statewide Systemic Initiatives (SSI) Program

Puerto Rico's SSI, a joint venture between the U.S. Department of Education Resource Center for Science and Engineering and the Puerto Rico General Council of Education, will focus on students' cognitive abilities and depth of scientific understanding; revise teacher preparation; promote community involvement; and develop new assessment methods.

Manuel Gomez Resource Center for Science and Engineering

University of Puerto Rico PO Box 23334, University Station San Juan, PR 00931-3334 (809) 764-8369 / Fax: (809) 764-0625

Pedro Rodrigues-Esquerdo Resource Center for Science and Engineering University of Puerto Rico PO Box 23334, University Station San Juan, PR 00931-3334 (809) 764-7320 / Fax: (809) 751-0625

#### Rhode Island

#### ▶ Department of Agriculture (USDA)

#### 4-H State Leader

The State 4-H Youth Development Programs are administered by the Cooperative Extension Service at land-grant universities. State 4-H leaders coordinate outreach services and training to all county offices.

Dr. J. Whitney Bancroft, State 4-H Coordinator University of Rhode Island Rodman Hall Kingston, RI 02881-0804 (401) 792-2435 / Fax: (401) 874-4395 E-mail: jwbancr@uriacc.uri.edu

#### Ag in the Classroom State Leader

This program promotes increased understanding of agriculture and possible careers in the agricultural sciences. With National leadership provided by USDA, each State manages its own programs, with assistance from agribusiness, educational institutions, and government.

Carol Stamp 1 Stamp Place South Country Trail Exeter, RI 02822 (401) 783-7704

## **▶** Department of Commerce (DOC)

### Narragansett Bay National Estuarine Research Reserve

Offsite estuarine education programs are conducted by naturalists at the reserve throughout the summer. Reservations are required. The reserve also offers on- and offsite exhibits about estuarine ecology and historical uses of the area.

Amy Costa, Education Coordinator Narragansett Bay National Estuarine Research Reserve Department of Environmental Management PO Box 151 Prudence Island, RI 02872 (401) 683-5061 / Fax: (401) 683-5061

#### National Sea Grant College Program, Operation Pathfinder

The program consists of two-week summer courses that present an introduction to oceanographic and coastal processes. Courses are available in six regions and are designed to enhance skills in science teaching.

Sharon Meeker New Hampshire-Maine Sea Grant Kingman Farm University of New Hampshire Durham, NH 03824-3512 (603) 749-1565 / Fax: (603) 743-3997

#### ▶ Department of Defense (DoD)

#### Naval War College Museum

The college museum features exhibits on the history of naval warfare and also identifies the milestones in the evolution of war at sea, including technological advances.

Naval War College Museum 686 Cushing Road Newport, RI 02841-1207 (401) 841-4052

#### ▶ Department of Education (ED)

## The Eisenhower Regional Alliance for Mathematics and Science Education Reform

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Mark Kaufman and Bob McLaughlin, Co-Directors Eisenhower Regional Alliance for Mathematics and Science Education Reform TERC 2067 Massachusetts Avenue

206/ Massachusetts Avenue Cambridge, MA 02140 (617) 547-0430 / Fax: (617) 349-3535 WWW: http://www.ra.terc.edu

#### **Eisenhower State Coordinators**

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Richard Latham
Eisenhower Professional Development
Program
Rhode Island Department of Education
22 Hayes Street
Providence, RI 02908
(401) 277-6523 / Fax: (401) 277-6178

### Eisenhower State Coordinators for Higher Education

Eisenhower State Coordinators oversee the Eisenhower Professional Development State Formula Grants for the State Agency for Higher Education (SAHE). The program focuses on teacher enhancement through both inservice and preservice programs.



Dr. Cynthia V. L. Ward or Chris Wessells Eisenhower Professional Development Program Rhode Island Office of Higher Education 301 Promenade Street Providence, RI 02908-5720 (401) 277-6560 ext. 133 Fax: (401) 277-6111

### Northeast Regional Technology in Education Consortium (NetTech)

ED established the Regional Technology in Education Consortia (R\*TEC) program in the fall of 1995 to help States, districts, schools, adult literacy centers, and other educational institutions use advanced technology to support improved teaching and student achievement. R\*TEC's role in educational technology is unique in two ways: the emphasis is regional and the primary goal is to ensure that technology is used effectively to support school reform. Program strategies include professional development, technical assistance, and information dissemination.

Bonnie Brownstein and Michael Ribaudo, Co-Directors NetTech City University of New York 555 West 57th Street New York, NY 10019 (212) 541-0972 / Fax: (212) 541-0357 E-mail: blbbh@cunyvm.cuny.edu WWW: http://www.nettech.org/

Kathy Fuller, R\*TEC Project Officer U.S. Department of Education Office of Educational Research and Improvement ORAD/SLSD, Room 506c 555 New Jersey Avenue NW Washington, DC 20208-5644 (202) 219-2281 E-mail: Kathy\_Fuller@ed.gov

#### Northeast and Islands Regional Educational Laboratory at Brown University (LAB)

LAB identifies effective teaching techniques and school improvement efforts within the region and shares this information with State and local educators.

Dr. Phil Zarlengo, Executive Director 222 Richmond Street, Suite 300 Providence, RI 02903-4226 (800) 521-9550 (401) 274-9548 / Fax (401) 421-7650 WWW: http://www.vlab.brown.edu/

## ► Department of the Interior (DOI)

### Bureau of Land Management Eastern States Office

This office provides information about educational programs, materials, and local land-management issues.

Education Coordinator Bureau of Land Management 7450 Boston Boulevard Springfield, VA 22153 (703) 440-1713

### Minerals Management Service (MMS) Regional Office

The MMS Regional Office provides a range of educational services. Teacher inservice programs and classroom visitations may include supplemental materials. Availability may be limited, but arrangements may be made for duplication of some materials at minimal cost.

Offshore Minerals Management Technical Communications Service Minerals Management Service 381 Eldon Street, MS 4530 Herndon, VA 20170-4817 (703) 787-1080 / Fax: (703) 787-1186

Office of Communications & Governmental Affairs Education Coordinator Minerals Management Service 1849 C Street NW; LMS4230 Washington, DC 20240-0001 (202) 208-3985 / Fax: (202) 208-3968

#### Ninigret National Wildlife Refuge

The refuge offers a wildlife management and environmental education program for students of all ages. Outreach programs, teacher workshops, and field trips are also sponsored.

Outdoor Recreation Planner Shoreline Plaza, Route 1A PO Box 307 Charlestown, RI 02813 (401) 364-9124 / Fax: (401) 364-0170

#### **Project WILD**

Project WILD offers teacher training and educational materials. Teacher guides, free to teachers who attend the training session, contain more than 80 supplementary, interdisciplinary activities for grades K-12.

Chris Dudley, Project WILD Coordinator Rhode Island Division of Fish and Wildlife PO Box 218 West Kingston, RI 02892 (401) 789-0281 / Fax: (401) 783-7490

## ► Department of Labor (DOL)

### Job Training Partnership Act (JTPA) Liaison

The JTPA Liaison can provide information about the Job Training Partnership Act State and local programs for economically disadvantaged adults and youth.

Marvin D. Perry, Director Job Training Partnership Office Rhode Island Department of Employment and Training 101 Friendship Street Providence, RI 02903-3740 (401) 277-3600 / Fax: (401) 277-2731

## ► Department of Transportation (DOT)

### Federal Aviation Administration (FAA) Aviation Education

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  leadership workshops and provide funds
  based on the availability of resources.
- ▶ Aviation Education Workshops for Teachers provide teachers with information on FAA aviation programs and materials and prepare them to teach aviation in the classroom. Annual workshops are conducted at colleges and universities across the Nation. The FAA provides information, materials, and speakers for the program.
- ▶ National Congress on Aviation and Space Education is sponsored annually by the FAA in partnership with the National Aeronautics and Space Administration and the Civil Air Patrol. The meeting includes teacher workshops and crosstalk sessions to exchange ideas on promoting aerospace education.



Sheila Bauer, ANE-45, FAA Aviation Education Representative 12 New England Executive Park Burlington, MA 01803 (617) 238-7378 / Fax: (617) 238-7007

### FAA Aviation Education Resource Centers

Located at colleges, museums, and State aviation authority offices, these centers function as information distribution centers for Federal Aviation Administration education materials and resources. The Resource Centers maintain and provide quantities of printed materials, videotapes, and computer educational software. Center personnel can also provide general information, conduct workshops, and make aviation-related presentations.

Anthony Gagliardi Aviation Education Resource Center Warwick Public Schools Warwick Career and Technical School 575 Centerville Road Warwick, RI 02886 (401) 737-3300

## ► Environmental Protection Agency (EPA)

### Environmental Research Laboratory

Students have the opportunity to interact directly with scientists at the laboratory through a mentorship program.

U.S. Environmental Protection Agency Environmental Research Laboratory South Ferry Road Narragansett, RI 02882 (401) 782-3028

#### **EPA Regional Office**

This office takes part in a variety of environmental education programs for both teachers and students. Programs range from teacher workshops and student contests to in-school presentations. Information on environmental issues is also available through the Public Information Center located at the office.

Maria Pirie, Environmental Education Coordinator Environmental Protection Agency JFK Federal Building (RPM) Boston, MA 02203 (617) 565-9447 / Fax: (617) 565-3415

### The President's Environmental Youth Awards (PEYA) Program

Young people from each State are invited to participate in PEYA, a nationwide program

designed to encourage individuals, school classes, summer camps, public interest groups, and youth organizations to promote environmental awareness and community involvement. The two components of the program are the regional certificate program and the National awards competition. Regional certificates, signed by the President, are awarded to each participant by EPA regional offices. National individual project winners, or one representative from a National awardwinning group project, along with one sponsor, are honored at EPA headquarters in Washington, DC. Interested K-12 individuals or groups may obtain application materials and contest rules by contacting the EPA Regional Office that serves their State. PEYA has been an ongoing project since it was created by the White House Office of Education and the EPA in 1971.

EPA Region 1 JFK Federal Building Boston, MA 02203 (617) 565-9447 / Fax: (617) 565-3415

# ► National Aeronautics and Space Administration (NASA)

#### **NASA Educator Resource Center**

The center has NASA-related educational materials in various formats, including laserdiscs, CD-ROMs, videotapes, slides, audiotapes, publications, and teacher guides. Educators may preview or copy NASA materials upon request.

Educator Resource Laboratory NASA Goddard Space Flight Center Mail Code 130.3 Greenbelt, MD 20771-0001 (301) 286-8570

#### **NASA Field Centers**

Each field center has an educational programs officer who is responsible for precollege education programs. In addition to administering National programs, the center offers programs and services to meet regional and local needs.

Education Programs NASA Goddard Space Flight Center Mail Code 130 Greenbelt, MD 20771-0001 (301) 286-7206

#### NASA Regional Educator Resource Center (RERC)

To offer more educators the opportunity to visit the Educator Resource Center Network (ERCN), NASA forms partnerships with

planetariums, universities, museums, and other nonprofit organizations to serve as RERCs. Teachers may preview or copy NASA materials upon request.

Rhode Island College NASA Regional Educator Resource Center Curriculum Resources Center 600 Mount Pleasant Avenue Providence, RI 02908 (401) 456-8567/8065

#### **Space Grant Consortium**

The Space Grant Consortium in each State consists of colleges, universities, industry, and other organizations that have an interest in aeronautics and space education. Each consortium receives NASA funds for use in implementing a balanced program of research, education, and public service.

Rhode Island Space Grant Consortium Department of Geological Sciences Box 1846 Brown University Providence, RI 02912-1846 (401) 863-2417

#### **Vermont**

## ► Department of Agriculture (USDA)

#### 4-H State Leader

The State 4-H Youth Development Programs are administered by the Cooperative Extension Service at land-grant universities. State 4-H leaders coordinate outreach services and training to all county offices.

Dr. Mary Carlson, 4-H Youth Development Specialist University of Vermont 102B Morrill Hall Burlington, VT 05405 (802) 656-0311 / Fax: (802) 656-1423 E-mail: mcarlson@moose.uvm.edu

#### Ag in the Classroom State Leader

This program promotes increased understanding of agriculture and possible careers in the agricultural sciences. With National leadership provided by USDA, each State manages its own programs, with assistance from agribusiness, educational institutions, and government.



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Megan Camp Shelburne Farms Shelburne, VT 05482 (802) 985-8686 / Fax: (802) 985-8498

Susan R. Duerst Vermont Farm Bureau RR2 Box 123 Richmond, VT 05477

#### ▶Department of Education (ED)

## The Eisenhower Regional Alliance for Mathematics and Science Education Reform

The Eisenhower Regional Consortium provides information and technical assistance to help States and school districts improve mathematics and science education.

Mark Kaufman and Bob McLaughlin, Co-Directors Eisenhower Regional Alliance for Mathematics and Science Education Reform TERC 2067 Massachusetts Avenue Cambridge, MA 02140 (617) 547-0430 / Fax: (617) 349-3535 WWW: http://www.ra.terc.edu

#### **Eisenhower State Coordinators**

Eisenhower State Coordinators administer the Eisenhower Professional Development Program State Formula grants. The program focuses on sustained and intensive high-quality professional development through inservice programs.

Peg Meyer, Eisenhower Professional
Development Coordinator
Eisenhower Professional Development
Program
Vermont Department of Education
120 State Street
Montpelier, VT 05602
(802) 828-3111 / Fax: (802) 828-3140 or 3146

### Eisenhower State Coordinators for Higher Education

Eisenhower State Coordinators oversee the Eisenhower Professional Development State Formula Grants for the State Agency for Higher Education (SAHE). The program focuses on teacher enhancement through both inservice and preservice programs.

Robert Kenney Eisenhower Professional Development Program Vermont Department of Education 120 State Street Montpelier, VT 05602 (802) 828-3111 / Fax: (802) 828-3140

### Northeast Regional Technology in Education Consortium (NetTech)

ED established the Regional Technology in Education Consortia (R\*TEC) program in the fall of 1995 to help States, districts, schools, adult literacy centers, and other educational institutions use advanced technology to support improved teaching and student achievement. R\*TEC's role in educational technology is unique in two ways: the emphasis is regional and the primary goal is to ensure that technology is used effectively to support school reform. Program strategies include professional development, technical assistance, and information dissemination.

Bonnie Brownstein and Michael Ribaudo, Co-Directors NetTech City University of New York 555 West 57th Street New York, NY 10019 (212) 541-0972 / Fax: (212) 541-0357 E-mail: blbbh@cunyvm.cuny.edu WWW: http://www.nettech.org/

Kathy Fuller, R\*TEC Project Officer U.S. Department of Education Office of Educational Research and Improvement ORAD/SLSD, Room 506c 555 New Jersey Avenue NW Washington, DC 20208-5644 (202) 219-2281 E-mail: Kathy\_Fuller@ed.gov

#### Northeast and Islands Regional Educational Laboratory at Brown University (LAB)

LAB identifies effective teaching techniques and school improvement efforts within the region and shares this information with State and local educators.

Dr. Phil Zarlengo, Executive Director 222 Richmond Street, Suite 300 Providence, RI 02903-4226 (800) 521-9550 (401) 274-9548 / Fax (401) 421-7650 WWW: http://www.vlab.brown.edu/

## ► Department of the Interior (DOI)

### Lake Champlain Fish and Wildlife Resources Office

In the program Atlantic Salmon Restoration in the Connecticut River, students are given a slide show/discussion on the Atlantic salmon program and the biology of the Atlantic salmon. They also tour a salmon fish hatchery and assist by stocking Atlantic salmon in tributaries of the Connecticut River.

Carl F. Baren, Coordinator Lake Champlain Fish and Wildlife Resources Office

11 Lincoln Street Essex Junction, VT 05452 (802) 951-6313 / Fax: (802) 951-6315 E-mail: r5fa\_lcfwro@5ha~main1

### Bureau of Land Management Eastern States Office

This office provides information about educational programs, materials, and local land-management issues.

Education Coordinator Bureau of Land Management 7450 Boston Boulevard Springfield, VA 22153 (703) 440-1713

### Minerals Management Service (MMS) Regional Office

The MMS Regional Office provides a range of educational services. Teacher inservice programs and classroom visitations may include supplemental materials. Availability may be limited, but arrangements may be made for duplication of some materials at minimal cost.

Offshore Minerals Management Technical Communications Service Minerals Management Service 381 Eldon Street, MS 4530 Herndon, VA 20170-4817 (703) 787-1080 / Fax: (703) 787-1186

Office of Communications & Governmental Affairs Education Coordinator Minerals Management Service 1849 C Street NW; LMS4230 Washington, DC 20240-0001 (202) 208-3985 / Fax: (202) 208-3968

#### **Project WILD**

Project WILD offers teacher training and educational materials. Teacher guides, free to teachers who attend the training session, contain more than 80 supplementary, interdisciplinary activities for grades K–12.

Mark Scott, Project WILD Coordinator Department of Fish and Wildlife 103 South Main Street Waterbury, VT 05676 (802) 241-3700 / Fax: (802) 241-3295

## ► Department of Labor (DOL)

### Job Training Partnership Act (JTPA) Liaison

The JTPA Liaison can provide information



about the Job Training Partnership Act State and local programs for economically disadvantaged adults and youth.

Robert Ware, Job Training Partnership Act

Department of Employment and Training PO Box 488, 5 Green Mountain Drive Montpelier, VT 05601-0488 (802) 828-4300 / Fax: (802) 828-4022

## ► Department of Transportation (DOT)

### Federal Aviation Administration (FAA) Aviation Education

The FAA Aviation Education Representative coordinates aviation education services, including materials and programs for the FAA in the States assigned to the region.

Programs include the following:

- ▶ The Aviation Career Education (ACE)
  Academy is a one-week summer aviation
  education program for high school students sponsored by the FAA along with a
  host educational institution. The program
  provides students with diverse experiences
  in aviation career exploration. The focus
  is on aviation career clusters identified by
  FAA, with an emphasis on opportunities
  for women and minorities. A goal is to
  have one program in each State and U.S.
  Territory. The FAA will conduct regional
  leadership workshops and provide funds
  based on the availability of resources.
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Sheila Bauer, ANE-45, FAA Aviation Education Representative 12 New England Executive Park Burlington, MA 01803 (617) 238-7378 / Fax: (617) 238-7007

### FAA Aviation Education Resource Centers

Located at colleges, museums, and State aviation authority offices, these centers function as information distribution centers for Federal Aviation Administration education materials and resources. The Resource Centers maintain and provide quantities of printed materials, videotapes, and computer educational software. Center personnel can also provide general information, conduct workshops, and make aviation-related presentations.

John Barney, Vocational Director Aviation Education Resource Center St. Johnsbury Academy St. Johnsbury, VT 05816 (802) 748-8171

Rick Sylvester, Aviation Instructor State of Vermont RM A-322 Burlington Technical Center 52 Institute Burlington, VT 05401 (808) 864-8424

## ► Environmental Protection Agency (EPA)

#### **EPA** Regional Office

This office takes part in a variety of environmental education programs for both teachers and students. Programs range from teacher workshops and student contests to in-school presentations. Information on environmental issues is also available through the Public Information Center located at the office.

Maria Pirie, Environmental Education Coordinator Environmental Protection Agency JFK Federal Building (RPM) Boston, MA 02203 (617) 565-9447 / Fax: (617) 565-3415

### The President's Environmental Youth Awards (PEYA) Program

Young people from each State are invited to participate in PEYA, a nationwide program designed to encourage individuals, school classes, summer camps, public interest groups, and youth organizations to promote environmental awareness and community involvement. The two components of the program are the regional certificate program and the National awards competition. Regional certificates, signed by the President, are awarded to each participant by EPA regional offices. National individual project winners, or one representative from a National awardwinning group project, along with one sponsor, are honored at EPA headquarters in

Washington, DC. Interested K–12 individuals or groups may obtain application materials and contest rules by contacting the EPA Regional Office that serves their State. PEYA has been an ongoing project since it was created by the White House Office of Education and the EPA in 1971.

EPA Region 1 JFK Federal Building Boston, MA 02203 (617) 565-9447 / Fax: (617) 565-3415

# ► National Aeronautics and Space Administration (NASA)

#### **NASA Educator Resource Center**

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Educator Resource Laboratory NASA Goddard Space Flight Center Mail Code 130.3 Greenbelt, MD 20771-0001 (301) 286-8570

#### **NASA Field Centers**

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Education Programs NASA Goddard Space Flight Center Mail Code 130 Greenbelt, MD 20771-0001 (301) 286-7206

#### NASA Regional Educator Resource Center (RERC)

To offer more educators the opportunity to visit the Educator Resource Center Network (ERCN), NASA forms partnerships with planetariums, universities, museums, and other nonprofit organizations to serve as RERCs. Teachers may preview or copy NASA materials upon request.

Norwich University Vermont College Educational Resource Center NASA Regional Educator Resource Center Schulmaier Hall Montpelier, VT 05602 (802) 828-8845





#### **Space Grant Consortium**

The Space Grant Consortium in each State consists of colleges, universities, industry, and other organizations that have an interest in aeronautics and space education. Each consortium receives NASA funds for use in implementing a balanced program of research, education, and public service.

Vermont Space Grant Consortium University of Vermont Department of Mathematics and Statistics College of Engineering and Mathematics 16 Colchester Avenue Burlington, VT 05405 (802) 656-2940

## ► National Science Foundation (NSF)

### Statewide Systemic Initiatives (SSI) Program

The major components of Vermont's SSI Program are the statewide curriculum framework; intensive development of the teaching staff; new performance assessments; and a statewide telecomputing network linking schools, business, and higher education.

Frank Watson Vermont SSI PO Box 310 Waterbury Center, VT 05677-0310 (802) 244-8768

### Virgin Islands

## ► Department of Agriculture (USDA)

#### 4-H State Leader

The State 4-H Youth Development Programs are administered by the Cooperative Extension Service at land-grant universities. State 4-H leaders coordinate outreach services and training to all county offices.

Zoraida Jacobs, Program Leader, 4-H University of the Virgin Islands Rural Route 02, Box 10,000 Kingshill St. Croix, VI 00850 (809) 692-4088 / Fax: (809) 692-4085

#### Ag in the Classroom State Leader

This program promotes increased understanding of agriculture and possible careers in the agricultural sciences. With National leadership provided by USDA, each State manages its own programs, with assistance from agribusiness, educational institutions, and government.

Otis Hicks PO Box 804 Christianstad, St. Croix, VI 00821-0804 (809) 773-0758

Eric Bough Department of Economic Development and Agriculture St. Croix, VI 00850 (809) 778-0991

## Department of Education (ED)

## The Eisenhower Regional Alliance for Mathematics and Science Education Reform

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Dr. Phil Zarlengo, Executive Director 222 Richmond Street, Suite 300 Providence, RI 02903-4226 (800) 521-9550 (401) 274-9548 / Fax (401) 421-7650 WWW: http://www.vlab.brown.edu/

## Southeast and Islands Regional Technology in Education Consortium (SEIR\*TEC)

ED established the Regional Technology in Education Consortia (R\*TEC) program in the fall of 1995 to help States, districts, schools, adult literacy centers, and other educational institutions use advanced technology to support improved teaching and student achievement. R\*TEC's role in educational technology is unique in two ways: the emphasis is regional and the primary goal is to ensure that technology is used effectively to support school reform. Program strategies include professional development, technical assistance, and information dissemination.

Don Holznagel, Director SEIR\*TEC 41 Marietta Street NW, Suite 1000 Atlanta, GA 30303 (800) 659-3204 (404) 893-0100 / Fax: (404) 577-7812 E-mail: dholznag@serve.org WWW: http://www.serve.org/seir-tec/

Deborah Williams, R\*TEC Project Officer U.S. Department of Education Office of Educational Research and Improvement ORAD/SLSD, Room 504f 555 New Jersey Avenue NW Washington, DC 20208-5644 (202) 219-2204 E-mail: Deborah\_Williams@ed.gov

#### ▶ Department of Labor (DOL)

### Job Training Partnership Act (ITPA) Liaison

The JTPA Liaison can provide information about the Job Training Partnership Act State and local programs for economically disadvantaged adults and youth.

Carol M. Burke, Assistant Commissioner Employment and Training Virgin Islands Department of Labor 7 and 8 Queen Streets, C'sted St. Croix, VI 00820 (809) 773-1994 / Fax: (809) 773-1515

## ► Department of Transportation (DOT)

### Federal Aviation Administration (FAA) Aviation Education

The FAA Aviation Education Representative coordinates aviation education services, including materials and programs for the FAA in the States assigned to the region.

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George Burnette, ASO-17B.1, FAA Aviation Education Representative 1701 Columbia Avenue College Park, GA 30337 (404) 305-5350 / Fax: (404) 305-5312

## ► Environmental Protection Agency (EPA)

#### **EPA** Regional Office

This office takes part in a variety of environmental education programs for both teachers and students. Programs range from teacher workshops and student contests to in-school presentations. Information on environmental issues is also available through the Public Information Center located at the office.

Terry Ippolito, Environmental Education Coordinator Environmental Protection Agency 290 Broadway, 26th Floor New York, NY 10007 (212) 637-3671 / Fax: (212) 637-4445

### The President's Environmental Youth Awards (PEYA) Program

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environmental awareness and community involvement. The two components of the program are the regional certificate program and the National awards competition. Regional certificates, signed by the President, are awarded to each participant by EPA regional offices. National individual project winners, or one representative from a National awardwinning group project, along with one sponsor, are honored at EPA headquarters in Washington, DC. Interested K-12 individuals or groups may obtain application materials and contest rules by contacting the EPA Regional Office that serves their State. PEYA has been an ongoing project since it was created by the White House Office of Education and the EPA in 1971.

EPA Region 2 290 Broadway, 26th Floor New York, NY 10007 (212) 637-3678 / Fax: (212) 637-4445

# ► National Aeronautics and Space Administration (NASA)

#### **NASA Educator Resource Center**

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NASA John F. Kennedy Space Center Educator Resource Center Mail Code ERC Kennedy Space Center, FL 32899-0001 (407) 867-4090

#### **NASA Field Centers**

Each field center has an educational programs officer who is responsible for precollege education programs. In addition to administering National programs, the center offers programs and services to meet regional and local needs.

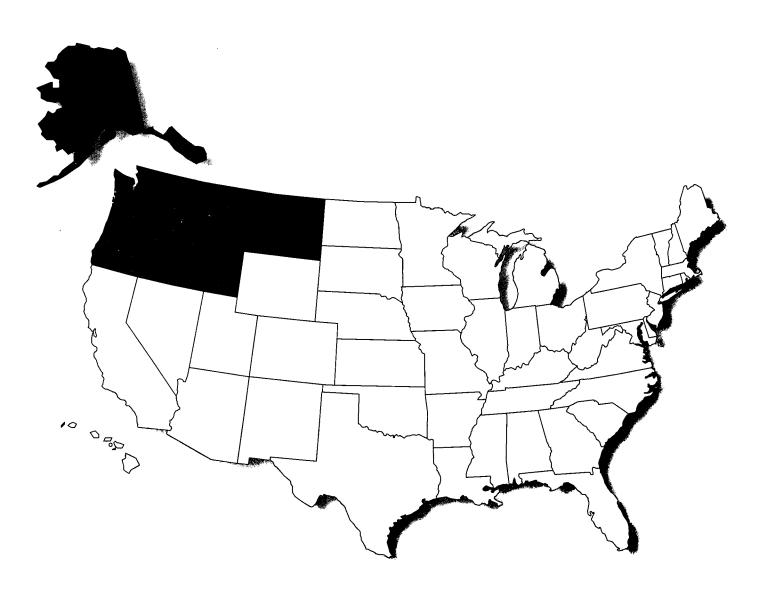
Steve Dutczak, Chief Education Services Branch NASA John F. Kennedy Space Center Mail Code PA-ESB Kennedy Space Center, FL 32899-0001 (407) 867-4444



- ► Alaska
- ▶ Idaho
- **▶** Montana
- **▶** Oregon
- **▶** Washington



Science and Mathematics Consortium for Northwest Schools





### Science and Mathematics Consortium for Northwest Schools



he Science and Mathematics Consortium for Northwest Schools (SMCNWS) project, conducted by The Columbia Education Center (CEC), serves schools and agencies in Alaska, Idaho, Montana, Oregon, and Washington. SMCNWS is one of 10 Regional Consortia across the country. The Consortium is an integral part of a National effort to improve mathematics and science education led by the Eisenhower Federal Activities Program, administered by the Office of Educational Research and Improvement (OERI) of the U.S. Department of Education.

SMCNWS seeks to help improve the mathematics and science education in the Northwest's K-12 schools by forming a consortium of education-related agencies in the Northwest, and providing catalytic support and assistance to the reform efforts of these agencies.

The Consortium is not defined as those individuals employed by the project. It is better thought of as the sum total of the partnerships we create with other stakeholders in mathematics and science education in the region and Nationally. These stakeholders represent a broad spectrum of those concerned with education: State Departments of Education, State math and science professional organizations, other education-related nonprofit organizations, school districts, schools, and teachers, corporate educational outreach departments, informal math and science agencies, community members.

As part of this consortium, we rarely operate independently. Rather, almost every initiative we undertake is done in partnership with one or more consortium members, each bringing resources to accomplish purposes none could do as easily or effectively alone.

#### Philosophy and Beliefs

SMCNWS believes that educational improvement begins in the classroom. Teachers are professionals; they want to learn and apply new teaching methods and approaches. Teachers recognize that continued professional development is a necessary—and a desirable—element of a successful teaching career. Given the opportunity and support, teachers will seek out such training and become

enthusiastic agents of lasting change and improvement in classroom outcomes.

SMCNWS honors and respects teachers as the primary agents of educational improvement. It is the belief of SMCNWS that teachers are fully capable of determining appropriate professional development activities. Within the framework of the various National science and mathematics standards, each State's reform efforts, and the teacher's district and building-wide effort to align with these standards, we believe that teams of teachers are the best "units of reform." Given the opportunity and access to appropriate technical assistance, teams of teachers can both design and implement sustained professional development programs that are congruent with district, State, and National reform efforts.

The SMCNWS philosophy is to empower teachers to undertake such initiatives. More than 20 percent of the annual budget is devoted to direct support of teams of teachers who, with the support of the district superintendent and technical assistance of SMCNWS, propose, design, and implement staff development activities that will further systemic reform in mathematics and science education in their districts.

#### Typical SMCNWS Project **Activities**

- Collecting, organizing, evaluating, and distributing lists of promising and exemplary science and math programs.
- ▶ Promoting the use of resources and expertise available at "informal" science and mathematics education providers by "formal" science and mathematics education agencies.
- Collecting and distributing free and inexpensive samples and materials available from developers of innovative science and math resources in the region and the Nation.
- Collecting and distributing information about sources of "outside" funding available to schools involved in science and math education reform initiatives and

- helping teachers, administrators, and other educators access these funds by providing technical assistance in proposal development.
- Providing technical assistance in planning, conducting, and evaluating local staff development activities related to emerging priorities and needs in science and mathematics education. (On some limited occasions, SMCNWS will provide partial, leveraged financial support for high-priority staff development activities linked to system-wide reform plans.)
- Assisting in identifying and obtaining the services of qualified personnel to help local and State agencies and organizations establish and address emerging priorities in science and mathematics education.
- Assisting regional institutions and agencies in publicizing and recruiting participants for their staff development activities.
- Providing opportunities for State and local educators to participate in awareness programs that introduce exemplary National programs such as Project 2061, Equity 2000, and Eisenhower National Clearinghouse.
- Planning and conducting institutes, workshops, and seminars to prepare cadres of teachers for leadership roles in local and State staff development activities related to topics such as educational equity, technology in the classroom, frameworks and standards, and assessment.
- Expanding the regional capacity to use the resources and services of the Eisenhower National Clearinghouse for Mathematics and Science Education by establishing multiple ENC Access Centers at sites throughout the Northwest.
- Assisting educators to respond to the information and implications of the Third International Math and Science Study (TIMSS).
- Maintaining an Internet presence through a World Wide Web site, http://www/col-



ed.org/smcnws/, that includes information about all SMCNWS project activities and ensures access to project resources and services.

The essential consideration facing SMCNWS is how to help the communities, schools, and personnel that are ultimately responsible for bringing about systemic reform in science and mathematics education.

The regional approach must be coordinated. While SMCNWS cannot do it all, it can serve as a catalyst in identifying resources and assisting with the organization of a joint effort. The guiding principle of SMCNWS is to support regionally agreed upon goals and objectives in concert with all stakeholders.

Dr. Ralph T. Nelsen, Director

Rob Kremer, Administrative Coordinator

Chris Martinsen, Technology Coordinator

Stephanie Hoag, Alaska Coordinator

Barbara Eisenbarth, Idaho Coordinator

Patricia Johnson, Montana Coordinator

Carrie Grether, Oregon Coordinator

Andrea Anderson, Washington Co-Coordinator

Richard Mariotti, Washington Co-Coordinator

John Nelsen, CEC Associate

Joy Wallace, CEC Associate

Kam McCowan, ENC Demo Site Coordinator

Science and Mathematics Consortium for Northwest Schools (SMCNWS) Columbia Education Center 171 NE 102nd Ave Portland, OR 97220-4169 (503) 252-4999 / Fax: (503) 252-4866 WWW: http://www.col-ed.org/smcnws/

#### Alaska

#### ▶ Department of Agriculture (USDA)

#### 4-H State Leader

The State 4-H Youth Development Programs are administered by the Cooperative Extension Service at land-grant universities. State 4-H leaders coordinate outreach services and training to all county offices.

Dr. Dennis Crawford, 4-H State Program Leader University of Alaska at Fairbanks 193 Arctic Health Research Building, Room 123 Fairbanks, AK 99775-5200 (907) 474-5632 / Fax: (907) 474-5139 E-mail: ffdlc@aurora.alaska.edu

#### Ag in the Classroom State Leader

This program promotes increased understanding of agriculture and possible careers in the agricultural sciences. With National leadership provided by USDA, each State manages its own programs, with assistance from agribusiness, educational institutions, and government.

Ted Berry University of Alaska PO Box 62 Willow, AK 99688-0062 (907) 495-1018 / Fax: (907) 495-1264

## **▶** Department of Commerce (DOC)

#### National Sea Grant College Program, Operation Pathfinder

The program consists of two-week summer courses that present an introduction to oceanographic and coastal processes. Courses are available in six regions and are designed to enhance skills in science teaching.

Michael Spranger Washington Sea Grant University of Washington, HG-3 3716 Brooklyn Avenue NE Seattle, WA 98105-6716 (206) 543-6600 / Fax: (206) 685-0380

## ► Department of Education (ED)

#### **Eisenhower State Coordinators**

Eisenhower State Coordinators administer the Eisenhower Professional Development Program State Formula grants. The program focuses on sustained and intensive high-quality professional development through inservice programs.

Nanci Spear Eisenhower Professional Development Program Alaska Department of Education 801 West 10th Street, Suite 200 Juneau, AK 99801-1894 (907) 465-8718 / Fax: (907) 465-3396

### **Eisenhower State Coordinators** for Higher Education

Eisenhower State Coordinators oversee the Eisenhower Professional Development State Formula Grants for the State Agency for Higher Education (SAHE). The program focuses on teacher enhancement through both inservice and preservice programs.

Nanci Spear Eisenhower Professional Development Program Alaska Department of Education 801 West 10th Street, Suite 200 Juneau, AK 99801-1894 (907) 465-8718 / Fax: (907) 465-3396

### Northwest Educational Technology Consortium (NETC)

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Seymour Hanfling, Director Technology Program NETC 101 SW Main Street, Suite 500 Portland, OR 97204-3297 (503) 275-9500 / Fax: (503) 275-9584 E-mail: hanflins@nwrel.org WWW: http://www.netc.org



Gerald Malitz, R\*TEC Project Officer U.S. Department of Education Office of Educational Research and Improvement NCES, Room 410c 555 New Jersey Avenue NW Washington, DC 20208-5651 (202) 219-1364 E-mail: gmalitz@inet.ed.gov

### Northwest Regional Educational Laboratory (NWREL)

NWREL identifies effective teaching techniques and school improvement efforts within the region and shares this information with State and local educators.

Ethel Simon-McWilliams, Executive Director Northwest Regional Educational Laboratory 101 SW Main Street, Suite 500 Portland, OR 97204-3212 (503) 275-9500 / Fax: (503) 275-9489 WWW: http://www.nwrel.org

## Science and Mathematics Consortium for Northwest Schools

The Eisenhower Regional Consortium provides information and technical assistance to help States and school districts improve mathematics and science education.

Dr. Ralph T. Nelsen, Director
Science and Mathematics Consortium for
Northwest Schools (SMCNWS)
Columbia Education Center
171 NE 102nd Avenue
Portland, OR 97220-4169
(503) 252-4999 / Fax: (503) 252-4866
E-mail: 76106.3006@compuserve.com
WWW: http://www.col-ed.org/smcnws/

## ► Department of the Interior (DOI)

### Alaska Maritime National Wildlife Refuge

Pribilof Stewardship Camp is a summer nature camp for children, mainly Aleuts, of the Pribilof Islands. Day and overnight activities are designed to teach children about the natural and human history of their island. The goal is to combine traditional Aleut knowledge with western science.

In the Shorebird Sister Schools Project, schools along the Pacific flyway from southern California to Nome, Alaska, are linked via America Online to study the shorebird migration every April and May. Participant schools are selected from key migration stopover areas. Curriculum, flyway maps, and local experts are supplied. A field trip is required.

Poppy Benson, Outdoor Recreation Planner Alaska Maritime National Wildlife Refuge 2355 Kachemak Bay Drive, Suite 101 Homer, AK 99603 (907) 235-6546 / Fax: (907) 235-7783

### Anchorage, Alaska, Public Lands Information Center

In addition to educational programs on the cultural and natural histories of Alaska, the center loans educational materials to teachers.

Anchorage, Alaska, Public Lands Information Center 605 West Fourth Avenue Anchorage, AK 99501 (907) 271-2737

### Bureau of Land Management Anchorage District Office

Alaska Outdoor Week involves individuals from many different agencies and groups to present lessons to students on outdoor skills and environmental and natural resource education. Students receive five lessons during a one-day visit.

Other programs include the following:

- Campbell Creek Science Center was built to provide outdoor learning experiences, promote land stewardship, and function as a regional resource for environmental education. School groups, scout groups, and other civic groups may reserve the center for environmental education purposes. Participants can explore the rippling creeks and quiet forests of Campbell Tract, discover the area's wildlife and wildflowers, and understand the role people play in the local and global environment. The center features a 10,500 squarefoot central building with kitchen, dining room, greenhouse, interpretive displays, and living stream aquarium.
- ► The Campbell Tract Biological
  Inventories program relies on community
  volunteers to perform a variety of inventories (such as plant surveys, breeding bird
  surveys, insect inventories, mushroom
  inventories, and lichen studies) to learnwhat lives on Campbell Tract,
  Anchorage's backyard wildland.
- ▶ Campbell Tract Field Trips give teachers from local schools the chance to visit BLM-managed land near their district office. An education specialist works with teachers to design field trips that meet specific learning objectives for students. On field trip days, the education specialist and, in some cases, other resource specialists make presentations to students. All activities are hands-on.

- ▶ Earth Ranger Academy is an intensive three-day program to teach children ecological concepts, how those concepts relate to their daily lives, and how they can help conserve natural resources by modifying their use of resources.
- ► The Limits of Acceptable Change Monitoring Program employs community volunteers to conduct visitor surveys, and monitor trails and natural resources to maintain health of BLM's Campbell Tract and Urban Wildland.
- ▶ The Resource Apprenticeship Program for Students (RAPS) offers rural native students an opportunity to explore natural resource management careers and learn about the professional work environment by placing them in summer apprenticeships. Alongside specialists in over 10 State and Federal agencies, students work on an educational handbook, and have the opportunity to attend the Alaska Inter-Tribal Youth Practicum.
- ► The Resource Specialist Extension
  Program makes district office specialists
  available to visit school classrooms on an
  on-call basis. Resource specialists work
  with teachers and make presentations.

For information on these programs, contact:

Jeff Brune and Van Waggoner, Education Specialists; Janelle Eklund, Outdoor Recreation Planner; or Carrie Agibinik and Mike Johnson, RAPS Coordinators, at

Bureau of Land Management Anchorage District Office 6881 Abbott Loop Road Anchorage, AK 99507 (907) 267-1251 / Fax: (907) 267-1267

### **Bureau of Land Management State Office**

This office provides information about educational programs, materials, and local land-management issues.

Robert H. Jones Bureau of Land Management 222 West Seventh Avenue, #13 Anchorage, AK 99513-7599 (907) 271-3404

### Earth Science Information Center, Anchorage

The center offers information and sales service for U.S. Geological Survey map products and Earth science publications.

Anchorage Earth Science Information Center 4230 University Drive, Room 101 Anchorage, AK 99508-4664 (907) 786-7011 or 800-USA-MAPS



### Environmental Education Outreach

The National Park Service instructs students in environmental science in the classroom.

At Camp Sivunniigvik, personnel present environmental information/education to complement the cultural instruction presented by native Inupiaq Eskimos at this summer culture camp for youth.

Kimberly A. Valentino, Chief of Interpretation/Visitor Services PO Box 1029 Kotzebue, AK 99752 (907) 442-3760 or 3890 Fax: (907) 442-3482

### Fairbanks, Alaska, Public Lands Information Center

In addition to educational programs on the cultural and natural histories of Alaska, the center loans educational materials to teachers.

Fairbanks, Alaska, Public Lands Information Center 250 Cushman Street, Suite 1A Fairbanks, AK 99701 (907) 451-7352

#### Fairbanks Fishery

In the Integrated Fisheries Education program, education teams developed in each community (Dillingham, Galena) plan teachers' inservice training, workshops, and an indepth outdoor studies program for K–12 students. The study is based on Alaska's fisheries and aquatic systems.

Other programs include the following:

- ▶ The Adopt-A-Stream Program lets students "adopt" a local aquatic system for long-term monitoring of water quality, physical changes, and biological change. This is augmented in the classroom through use of a cold-water aquarium to house native fish for study. Students will also network, via the Internet, with other water quality monitoring programs throughout the country.
- ▶ Salmonids in the Classroom develops an appreciation of Alaska's native fisheries by allowing classrooms to hatch salmon eggs and track their development. A curriculum introduces aspects of salmon biology, life cycles, and conservation.

Laurel Devaney, Education Coordinator Fairbanks Fishery Resource Office 101 12th Avenue, Box 17, Room 222 Fairbanks, AK 99707 (907) 456-0558 / Fax: (907) 456-0454

#### Glacier Bay National Park

In addition to guided tours, Glacier Bay

National Park rangers conduct in-school presentations.

Glacier Bay National Park PO Box 140 Gustavus, AK 99826 (907) 697-2230

#### Innoko National Wildlife Refuge

In the Environmental Education Science Camp, high school students from the Iditarod area spend 15 days working and attending classes at the remote field camp on the refuge.

Beverly Skinner, Refuge Operations Specialist Innoko NWR, Box 69 McGrath, AK 99627 (907) 524-3251 / Fax: (907) 524-3141

#### Kanuti National Wildlife Refuge

Earth Quest (Northern Alaska Wildlife and Wildlands Education Camp) is sponsored by a partnership of local, State, Federal, and native organizations. The camp is designed to give rural Alaskan high school students a hands-on approach to methods used by natural resource professionals when collecting information in the field. It brings students and professionals together in an isolated setting for 10 days.

Barry Whitehill, Refuge Operations Specialist Kanuti NWR 101 12th Avenue, Room 112 Fairbanks, AK 99701 (907) 456-0330 / Fax: (907) 456-0506

#### Kenai Fjords National Park

Interpretive programs are offered to educate the public about glaciology, geology, flora, fauna, and the ocean/fjord environment, as well as about resource protection values.

The National Parks as Classrooms program offers environmental education across many disciplines to students from preschool through college, adapting to the curricula needs of classes involved. The program also offers a variety of adult education workshops.

Maria Gillett, Chief of Interpretation and Education Kenai Fjords National Park PO Box 1727 Seward, AK 99664 (907) 224-3175 / Fax: (907) 2242144 E-mail: Maria\_Gillett@nps.gov

#### Kenai National Wildlife Refuge

The Environmental Education Program provides teacher/youth leader workshops and credit courses. Adult leaders are trained in curricula that reflect refuge-related resource issues and subject areas important to the school district and to youth organizations

such as the Scouts, 4-H, and others. For preschool to first grade, thematic units include animals and their senses; for second and third grade, the theme is the role of predators in the ecosystem. Fourth through sixth grades study wetlands and wildlife, and sixth through eighth grades learn about the role of fire in the ecosystem.

Candace D. Ward, Park Ranger Kenai NWR PO Box 2139 Soldotna, AK 99669 (907) 262-7021 / Fax: (907) 262-3599

### Koyukuk/Nowitna National Wildlife Refuge

In Biological Skills Camp, participants learn about fish and wildlife management and the role of the National Wildlife Refuge System in resource conservation. Participants also develop skills needed to help qualify them for a biological technician position with the Service.

Heather Johnson, Park Ranger Koyukuk/Nowitna NWR PO Box 287 Galena, AK 99741 (907) 656-1231 / Fax: (907) 656-1708

### Minerals Management Service (MMS) Regional Office

The MMS Regional Office provides a range of educational services. Teacher inservice programs and classroom visitations may include supplemental materials. Availability may be limited, but arrangements may be made for duplication of some materials at minimal cost.

Alaska Outer Continental Shelf Region Minerals Management Service Office of Public Affairs 949 East 36th Avenue, #110, MS 8000 Anchorage, AK 99508-4302 (907) 271-6070 / Fax: (907) 271-6805

#### **Project WILD**

Project WILD offers teacher training and educational materials. Teacher guides, free to teachers who attend the training session, contain more than 80 supplementary, interdisciplinary activities for grades K-12.

Colleen Matt, Project WILD Coordinator Alaska Department of Fish and Game 333 Raspberry Road Anchorage, AK 99518-1599 (907) 267-2241 / Fax: (907) 344-7914

#### Tetlin National Wildlife Refuge

Refuge teacher workshops promote education in wildlife management and environmental issues. Curriculum materials and programs for students are also available.



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Other programs include the following:

- ▶ National Wildlife Week, sponsored by the National Wildlife Federation, is a weeklong event celebrated each spring. Each year a different theme is covered and includes wildlife, wildlife habitat, and environmental "happenings"—such as pollution—that affect all of us.
- ▶ The Summer Nature Camp is a series of day camps where students are taught about wildlife, wildlife habitat, natural fire effects and benefits for wildlife, and outdoor skills and care. Camps are held in local communities and on refuge lands; all include outdoor, hands-on educational activities. All of the activities are related to the Tetlin National Wildlife Refuge and natural areas (especially of Alaska).

Dave Dapkus, Supervisory Park Ranger Tetlin NWR PO Box 779 Tok, AK 99780 (907) 883-5312 / Fax: (907) 883-5747

#### **Water Conservation Center**

The center sponsors a Water Education Calendar and Poster Contest that results in a regional calendar produced in cooperation with the International Office of Water Education and Utah State University. The calendar highlights winners of State poster contests that emphasize water resource issues. The calendar is published and distributed to all elementary schools throughout Idaho, Washington, Oregon, Montana, Alaska, and Hawaii.

Debbie Cross, Public Affairs Officer Water Conservation Center PN-6430 North Curtis Road Boise, ID 83705 (208) 378-5020 / Fax: (208) 378-5066

### The U.S. Fish and Wildlife Service (USFWS)

In the Goose Calendar Contest, five refuges in western and northern Alaska invite local school children to participate in an art and literature competition. The contest highlights four species of arctic nesting geese whose populations have decreased. The winners of the contest have their work published in a color calendar that is distributed to communities in western and northern Alaska for free.

Other programs include the following:

▶ Learn About Seabirds is a curriculum developed to teach students in grades 4–6 throughout Alaska about seabird biology and what can be done to help seabirds. The curriculum includes a slide set, poster, and two booklets. The USFWS offers teacher workshops and credit courses.

- ▶ Role of Fire in Alaska consists of a K-12 curriculum, poster, video, slide show, display, and education kit. USFWS employees train educators in the use of these materials through university credit courses and shorter workshops.
- ➤ Wetlands and Wildlife and Teach About Geese are two K-12 curricula. Materials include a poster, slide show, display, and education kit. USFWS employees train educators in the use of these materials through university credit courses, as well as shorter workshops. These two curricula are presented together.

Catherine Rezabeck, Education Specialist USFWS Region 7 1011 East Tudor Road Anchorage, AK 99503 (907) 786-3351 / Fax: (907) 786-3635

### Yukon Delta National Wildlife Refuge

Refuge teacher workshops promote education in wildlife management and environmental issues. College credit for these workshops is available. Yukon Delta also hosts an extensive video library.

Western Alaska Natural Science Camp introduces native Alaskan students to scientific and traditional concepts of ecosystem management and biodiversity. Wildlife education and recreation activities promote environmental education. The activities also compare and contrast traditional native ecological knowledge about natural resources with scientific approaches to resource management.

Lorrie Beck, Outdoor Recreation Planner Yukon Delta NWR PO Box 346 Bethel, AK 99559 (907) 543-3151 / Fax: (907) 543-4413

## ► Department of Labor (DOL)

### Job Training Partnership Act (JTPA) Liaison

The JTPA Liaison can provide information about the Job Training Partnership Act State and local programs for economically disadvantaged adults and youth.

William Mailer Rural Development Division Alaska Department of Community and Regional Affairs 333 West Fourth Avenue, Suite 220 Anchorage, AK 99501-2341 (907) 269-4659 / Fax: (907) 269-4520

## ► Department of Transportation (DOT)

### Federal Aviation Administration (FAA) Aviation Education

The FAA Aviation Education Representative coordinates aviation education services, including materials and programs for the FAA in the States assigned to the region.

Programs include the following:

- ▶ The Aviation Career Education (ACE)
  Academy is a one-week summer aviation
  education program for high school students sponsored by the FAA along with a
  host educational institution. The program
  provides students with diverse experiences
  in aviation career exploration. The focus
  is on aviation career clusters identified by
  FAA, with an emphasis on opportunities
  for women and minorities. A goal is to
  have one program in each State and U.S.
  Territory. The FAA will conduct regional
  leadership workshops and provide funds
  based on the availability of resources.
- ▶ Aviation Education Workshops for Teachers provide teachers with information on FAA aviation programs and materials and prepare them to teach aviation in the classroom. Annual workshops are conducted at colleges and universities across the Nation. The FAA provides information, materials, and speakers for the program.
- ▶ National Congress on Aviation and Space Education is sponsored annually by the FAA in partnership with the National Aeronautics and Space Administration and the Civil Air Patrol. The meeting includes teacher workshops and crosstalk sessions to exchange ideas on promoting aerospace education..

Tom Lane, AAL-5C, FAA Aviation Education Representative 222 West Seventh Avenue, Box 14

Anchorage, AK 99513-7587 (907) 271-5169 / Fax: (907) 276-7261

### **FAA Aviation Education Resource Centers**

Located at colleges, museums, and State aviation authority offices, these centers function as information distribution centers for Federal Aviation Administration education materials and resources. The Resource Centers maintain and provide quantities of printed materials, videotapes, and computer educational software. Center personnel can also provide general information, conduct workshops, and make aviation-related presentations.



Dennis Stephens, Collection Development Officer

Aviation Education Resource Center University of Alaska, Fairbanks Elmer E. Rasmuson Library Fairbanks, AK 99775-1006 (907) 474-6695

Barbara Sokolov, Library Director Aviation Education Resource Center University of Alaska, Anchorage 3211 Providence Drive Anchorage, AK 99508 (907) 786-1825

Dr. Rusty Myers, Project Director Aviation Education Resource Center Alaska Pacific University 4101 University Anchorage, AK 99508 (907) 564-8207

## ► Environmental Protection Agency (EPA)

#### **EPA** Regional Office

This office takes part in a variety of environmental education programs for both teachers and students. Programs range from teacher workshops and student contests to in-school presentations. Information on environmental issues is also available through the Public Information Center located at the office.

Sally Hanft, Environmental Education Coordinator Environmental Protection Agency 1200 Sixth Avenue (EXA-142) Seattle, WA 98101 (206) 553-1207 / Fax: (206) 553-0149

### The President's Environmental Youth Awards (PEYA) Program

Young people from each State are invited to participate in PEYA, a nationwide program designed to encourage individuals, school classes, summer camps, public interest groups, and youth organizations to promote environmental awareness and community involvement. The two components of the program are the regional certificate program and the National awards competition. Regional certificates, signed by the President, are awarded to each participant by EPA regional offices. National individual project winners, or one representative from a National awardwinning group project, along with one sponsor, are honored at EPA headquarters in Washington, DC. Interested K-12 individuals or groups may obtain application materials and contest rules by contacting the EPA Regional Office that serves their State. PEYA

has been an ongoing project since it was created by the White House Office of Education and the EPA in 1971.

EPA Region 10 1200 Sixth Avenue Seattle, WA 98101 (800) 424-4EPA (206) 553-1207 / Fax: (206) 553-0149

# ► National Aeronautics and Space Administration (NASA)

#### **NASA Educator Resource Center**

The center has NASA-related educational materials in various formats, including laserdiscs, CD-ROMs, videotapes, slides, audiotapes, publications, and teacher guides. Educators may preview or copy NASA materials upon request.

NASA Ames Research Center Educator Resource Laboratory Educator Resource Center, MS T12-A Moffett Field, CA 94035-1000 (415) 604-3574

Alaska Science Center NASA Regional Educator Resource Center Alaska Pacific University 4101 University Drive Anchorage, AK 99508 (907) 564-8207

#### NASA Field Centers

Each field center has an educational programs officer who is responsible for precollege education programs. In addition to administering National programs, the center offers programs and services to meet regional and local needs.

Garth A. Hull, Chief Educational Programs Branch NASA Ames Research Center, MS 204-12 Moffett Field, CA 94035 (415) 604-5543

#### Space Grant Consortium

The Space Grant Consortium in each State consists of colleges, universities, industry, and other organizations that have an interest in aeronautics and space education. Each consortium receives NASA funds for use in implementing a balanced program of research, education, and public service.

Alaska Space Grant Consortium University of Alaska, Fairbanks 223 Duckering Building Fairbanks, AK 99775-5900 (907) 474-5206

#### Idaho

#### ▶ Department of Agriculture (USDA)

#### 4-H State Leader

The State 4-H Youth Development Programs are administered by the Cooperative Extension Service at land-grant universities. State 4-H leaders coordinate outreach services and training to all county offices.

Dr. Arlinda K. Nauman, State 4-H Director Morrill Hall, #103 University of Idaho Moscow, ID 83844-3015 (208) 885-6321 / Fax: (208) 885-6198 E-mail: fourh@idaho.edu

#### Ag in the Classroom State Leader

This program promotes increased understanding of agriculture and possible careers in the agricultural sciences. With National leadership provided by USDA, each State manages its own programs, with assistance from agribusiness, educational institutions, and government.

Rick Watley, Director Watley Associates 1741 Gibson Way Meridian, ID 83642 (208) 888-0988

## ► Department of Defense (DoD)

### Science and Engineering Apprentice Program

This program, supported by DoD and administered by The George Washington University, is designed to provide research experience for high school students attending school near this participating research facility. Each student works with a senior scientist or engineer who acts as a mentor for eight weeks during the summer.

George Guedel Naval Surface Warfare Center Acoustic Research Detachment (NSWC-ARD) PO Box 129 Bayview, ID 83803-0129 (208) 683-2321, ext. 4030



## ► Department of Education (ED)

#### **Eisenhower State Coordinators**

Eisenhower State Coordinators administer the Eisenhower Professional Development Program State Formula grants. The program focuses on sustained and intensive high-quality professional development through inservice programs.

Michael Murphy
Eisenhower Professional Development
Program
Idaho Department of Education
Len B. Jordan Office Building
Boise, ID 83720
(208) 334-2281 / Fax: (208) 334-2228

### **Eisenhower State Coordinators** for Higher Education

Eisenhower State Coordinators oversee the Eisenhower Professional Development State Formula Grants for the State Agency for Higher Education (SAHE). The program focuses on teacher enhancement through both inservice and preservice programs.

La Ron Smith and Michael Murphy Eisenhower Professional Development Program Idaho Department of Education Len B. Jordan Office Building Boise, ID 83720 (208) 334-2281 / Fax: (208) 334-2228

### Northwest Educational Technology Consortium (NETC)

ED established the Regional Technology in Education Consortia (R\*TEC) program in the fall of 1995 to help States, districts, schools, adult literacy centers, and other educational institutions use advanced technology to support improved teaching and student achievement. R\*TEC's role in educational technology is unique in two ways: the emphasis is regional and the primary goal is to ensure that technology is used effectively to support school reform. Program strategies include professional development, technical assistance, and information dissemination.

Seymour Hanfling, Director Technology Program NETC 101 SW Main Street, Suite 500 Portland, OR 97204-3297 (503) 275-9500 / Fax: (503) 275-9584 E-mail: hanflins@nwrel.org WWW: http://www.netc.org Gerald Malitz, R\*TEC Project Officer U.S. Department of Education Office of Educational Research and Improvement NCES, Room 410c 555 New Jersey Avenue NW Washington, DC 20208-5651 (202) 219-1364 E-mail: gmalitz@inet.ed.gov

### Northwest Regional Educational Laboratory (NWREL)

NWREL identifies effective teaching techniques and school improvement efforts within the region and shares this information with State and local educators.

Ethel Simon-McWilliams, Executive Director Northwest Regional Educational Laboratory 101 SW Main Street, Suite 500 Portland, OR 97204-3212 (503) 275-9500 / Fax: (503) 275-9489 WWW: http://www.nwrel.org

#### Science and Mathematics Consortium for Northwest Schools

The Eisenhower Regional Consortium provides information and technical assistance to help States and school districts improve mathematics and science education.

Dr. Ralph T. Nelsen, Director Science and Mathematics Consortium for Northwest Schools (SMCNWS) Columbia Education Center 171 NE 102nd Avenue Portland, OR 97220-4169 (503) 252-4999 / Fax: (503) 252-4866 E-mail: 76106.3006@compuserve.com WWW: http://www.col-ed.org/smcnws/

#### ▶ Department of Energy (DOE)

#### **Bonneville Power Administration**

The administration participates in a broad range of education programs in its service territory (Washington, Oregon, Idaho, and Western Montana). Various programs available for teachers and students include math and science enhancements, hands-on learning, work-site mentoring and apprenticeships, competitions, environmental education, tutoring, and others. Projects involve several business, schools, and government agency partnerships. Many employees volunteer each year for various programs.

Joan McNamara, Community Education Coordinator Bonneville Power Administration PO Box 3621 Routing APPP Portland, OR 97208-3621 (503) 230-3709 / Fax: (503) 230-5884 E-mail: jhmcnamara@bpa.gov

### Idaho National Engineering Laboratory

The laboratory offers programs and research experiences for educators and students, in science, mathematics, engineering, and technology. Programs are coordinated with universities and State departments of education.

Dr. Constance C. Blackwood Idaho National Energy Laboratory 1520 Sawtelle Drive Idaho Falls, ID 83405-2437 (208) 526-9221 / Fax: (208) 526-1880

#### ▶ Department of the Interior (DOI)

#### **Boise Interagency Fire Center**

The center provides information about educational programs, materials, and local land-management issues.

Education Coordinator Boise Interagency Fire Center 3905 Vista Avenue Boise, ID 83705 (208) 389-2446

### **Bureau of Land Management State Office**

This office offers various environmental education and land-management programs, such as the Nose to Nose Program. Information about educational programs, materials, and local land-management issues is also available.

Education Coordinator Bureau of Land Management 3880 Americana Terrace Boise, ID 83706 (208) 384-3020

#### **Bureau of Reclamation**

Environmental education on a variety of subjects is offered to teachers and students in grades K–12. Emphasis is on water resources; subjects vary from groundwater model to instant snow storms and wetlands in a pan. Programs are presented in the classroom as well as outdoors at laboratory schools, summer camps, and at some visitor centers. The program currently operates in the States of California, Colorado, Montana, Nevada, Idaho, and Utah.



Theresa Taylor, Environmental Education Program Assistant Denver Federal Center, D-5100 Building 67 Denver, CO 80225 (303) 236-9336 ext. 262

(303) 236-9336 ext. 2 Fax: (303) 236-3573

### Craters of the Moon National Monument

The monument offers guided walks and teacher guides that focus on the geology of the area. In the Education Outreach Program, staff provide two curricula for teachers planning trips to the monument, one for grades 5–6, and the other for high school students. The curricula contain information on monument resources and activities to be completed onsite and in the classroom. Also available upon request are trunks of support materials (videos, slides, books, maps, rock samples).

David Clark, Chief of Interpretation Craters of the Moon National Monument PO Box 29

Arco, ID 83213

(208) 527-3257 / Fax: (208) 527-3073

#### Deer Flat National Wildlife Refuge

An interpretation center at the refuge displays exhibits and information about wildlife management. Guided walks and lectures are available.

The refuge also participates in Project WILD for Teachers, which offers teacher training and educational materials. Teacher guides, free to teachers who attend the training session, contain more than 80 supplementary, interdisciplinary activities for grades K–12.

L.T. McGowan, Outdoor Recreation Planner Deer Flat NWR 13751 Upper Embankment Road Nampa, ID 83686

(208) 467-9278 / Fax: (208) 467-1019

### Hagerman Fossil Beds National Monument

The monument provides a teacher curriculum package and a traveling trunk of support materials for teachers of grades 7–9. Students learn about the sciences of geology, paleontology, and archaeology, as well as the history of the Oregon Trail. Teachers may take a college-level course for university credit to learn how to use the curriculum and the monument's resources. Guided tours are scheduled during the summer months, and a small visitor center with exhibits and audiovisual programs is available throughout the year.

The Traveling Trunk curriculum is designed to meet the needs of students in grades 7–9.

Topics include Idaho's fossil record as well as the Native American and Oregon Trail history. The program supplements the State curriculum in a hands-on, interactive way.

Bob Willhite, Chief Ranger James Ward, Park Ranger Hagerman Fossil Beds National Monument 221 North State Street PO Box 570 Hagerman, ID 83332 (208) 837-4793 / Fax: (208) 837-4857

#### Pliocene Park

The park offers curriculum for teachers of grades 7–9 to complement their science education program and encourage utilization of the resources of the National monument.

Bob Willhite, Chief Ranger Hagerman Fossil Beds National Monument 221 North State Street PO Box 570 Hagerman, ID 83332 (208) 837-4793 / Fax: (208) 837-4857

### Project Water Education for Teachers (WET)

Project WET is an interdisciplinary water education program intended to supplement a school's existing curriculum. The following classroom-ready teaching aids are being developed: activity guides and modules for grades K–12, computer simulations, waterhistory publications, groundwater flow models, and a series of children's story and action books.

Debbie Cross, Public Affairs Officer Water Conservation Center PN-6430 North Curtis Road Boise, ID 83705 (208) 378-5020 / Fax: (208) 378-5066

Dorothea Kunz Shuman, Project WET Coordinator IWRRI, 106 Morrill Hall University of Idaho Moscow, ID 83843 (208) 885-6429

#### **Project WILD**

Project WILD offers teacher training and educational materials. Teacher guides, free to teachers who attend the training session, contain more than 80 supplementary, interdisciplinary activities for grades K-12.

John Gahl, Project WILD Coordinator Idaho Fish and Game Department PO Box 25 Boise, ID 83707 (800) 422-9453

(208) 334-2633 / Fax: (208) 334-2148

#### Water Conservation Center

The center sponsors a Water Education Calendar and Poster Contest that results in a regional calendar produced in cooperation with the International Office of Water Education and Utah State University. The calendar highlights winners of State poster contests that emphasize water resource issues. The calendar is published and distributed to all elementary schools throughout Idaho, Washington, Oregon, Montana, Alaska, and Hawaii.

Debbie Cross, Public Affairs Officer Water Conservation Center PN-6430 North Curtis Road Boise, ID 83705 (208) 378-5020 / Fax: (208) 378-5066

## ►Department of Labor (DOL)

### Job Training Partnership Act (ITPA) Liaison

The JTPA Liaison can provide information about the Job Training Partnership Act State and local programs for economically disadvantaged adults and youth.

Connie Ryals, Director Idaho Department of Employment 317 Main Street Boise, ID 83735-0001 (208) 334-6110 / Fax: (208) 334-6430

## ► Department of Transportation (DOT)

### Federal Aviation Administration (FAA) Aviation Education

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Territory. The FAA will conduct regional





leadership workshops and provide funds based on the availability of resources.

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- ▶ National Congress on Aviation and Space Education is sponsored annually by the FAA in partnership with the National Aeronautics and Space Administration and the Civil Air Patrol. The meeting includes teacher workshops and crosstalk sessions to exchange ideas on promoting aerospace education.

Herman Payton, ANM-14A FAA Aviation Education Representative 1601 Lind Avenue SW Renton, WA 98055-4056 (206) 227-2079 / Fax: (206) 227-1010

### FAA Aviation Education Resource Centers

Located at colleges, museums, and State aviation authority offices, these centers function as information distribution centers for Federal Aviation Administration education materials and resources. The Resource Centers maintain and provide quantities of printed materials, videotapes, and computer educational software. Center personnel can also provide general information, conduct workshops, and make aviation-related presentations.

John Maakestad, Safety/Information Officer, Chief Pilot Aviation Education Resource Center Idaho State Bureau of Aeronautics 3483 Rickenbacker Street

Boise, ID 83705-5018 (208) 334-8775

## ► Environmental Protection Agency (EPA)

#### **EPA** Regional Office

This office takes part in a variety of environmental education programs for both teachers and students. Programs range from teacher workshops and student contests to in-school presentations. Information on environmental issues is also available through the Public Information Center located at the office.

Sally Hanft, Environmental Education Coordinator Environmental Protection Agency

1200 Sixth Avenue (EXA-142) Seattle, WA 98101

(206) 553-1207 / Fax: (206) 553-0149

### The President's Environmental Youth Awards (PEYA) Program

Young people from each State are invited to participate in PEYA, a nationwide program designed to encourage individuals, school classes, summer camps, public interest groups, and youth organizations to promote environmental awareness and community involvement. The two components of the program are the regional certificate program and the National awards competition. Regional certificates, signed by the President, are awarded to each participant by EPA regional offices. National individual project winners, or one representative from a National awardwinning group project, along with one sponsor, are honored at EPA headquarters in Washington, DC. Interested K-12 individuals or groups may obtain application materials and contest rules by contacting the EPA Regional Office that serves their State. PEYA has been an ongoing project since it was created by the White House Office of Education and the EPA in 1971.

EPA Region 10 1200 Sixth Avenue Seattle, WA 98101 (800)424-4EPA (206) 553-1207 / Fax: (206) 553-0149

# ► National Aeronautics and Space Administration (NASA)

#### **NASA Educator Resource Center**

The center has NASA-related educational materials in various formats, including laserdiscs, CD-ROMs, videotapes, slides, audiotapes, publications, and teacher guides. Educators may preview or copy NASA materials upon request.

NASA Ames Research Center Educator Resource Laboratory Educator Resource Center, MS T12-A Moffett Field, CA 94035-1000 (415) 604-3574

#### **NASA Field Centers**

Each field center has an educational programs officer who is responsible for precollege education programs. In addition to administering National programs, the center offers programs and services to meet regional and local needs.

Garth A. Hull Chief, Educational Programs Branch NASA Ames Research Center, MS 204-12 Moffett Field, CA 94035 (415) 604-5543

#### NASA Regional Educator Resource Center (RERC)

To offer more educators the opportunity to visit the Educator Resource Center Network (ERCN), NASA forms partnerships with planetariums, universities, museums, and other nonprofit organizations to serve as RERCs. Teachers may preview or copy NASA materials upon request.

University of Idaho at Moscow NASA Regional Educator Resource Center Idaho Space Grant College Fellowship Program College of Education Moscow, ID 83843 (208) 885-6030

#### **Space Grant Consortium**

The Space Grant Consortium in each State consists of colleges, universities, industry, and other organizations that have an interest in aeronautics and space education. Each consortium receives NASA funds for use in implementing a balanced program of research, education, and public service.

Idaho Space Grant Consortium College of Education University of Idaho Moscow, ID 83844-3080 (208) 885-5762

#### Montana

## ►Department of Agriculture (USDA)

#### 4-H State Leader

The State 4-H Youth Development Programs are administered by the Cooperative Extension Service at land-grant universities. State 4-H leaders coordinate outreach services and training to all county offices.

Elizabeth McCoy, 4-H Program Leader Taylor Hall Montana State University Bozeman, MT 59717 (406) 994-3501 / Fax: (406) 994-5417



#### Ag in the Classroom State Leader

This program promotes increased understanding of agriculture and possible careers in the agricultural sciences. With National leadership provided by USDA, each State manages its own programs, with assistance from agribusiness, educational institutions, and government.

Margie Thompson Agriculture in Montana Schools Rural Route Wolfe Creek, MT 59648 (406) 562-3562

#### ▶ Department of Education (ED)

#### **Eisenhower State Coordinators**

Eisenhower State Coordinators administer the Eisenhower Professional Development Program State Formula grants. The program focuses on sustained and intensive high-quality professional development through inservice programs.

Linda Peterson
Eisenhower Professional Development
Program
Montana Office of Public Instruction
State Capitol Building
1300 11th Avenue
Helena, MT 59620
(406) 444-4436 / Fax: (406) 444-1469

### Eisenhower State Coordinators for Higher Education

Eisenhower State Coordinators oversee the Eisenhower Professional Development State Formula Grants for the State Agency for Higher Education (SAHE). The program focuses on teacher enhancement through both inservice and preservice programs.

Stuart Knapp
Eisenhower Professional Development
Program
Montana Office of Commissioner of Higher
Education
2500 Broadway
Helena, MT 59620-3103
(406) 444-6570 / Fax: (406) 444-1469

### Northwest Educational Technology Consortium (NETC)

ED established the Regional Technology in Education Consortia (R\*TEC) program in the fall of 1995 to help States, districts, schools, adult literacy centers, and other educational institutions use advanced technology to support improved teaching and student achievement. R\*TEC's role in educational technology is unique in two ways: the empha-

sis is regional and the primary goal is to ensure that technology is used effectively to support school reform. R\*TEC program strategies include professional development, technical assistance, and information dissemination.

Seymour Hanfling, Director Technology Program NETC 101 SW Main Street, Suite 500 Portland, OR 97204-3297 (503) 275-9500 / Fax: (503) 275-9584 E-mail: hanflins@nwrel.org WWW: http://www.netc.org

Gerald Malitz, R\*TEC Project Officer U.S. Department of Education Office of Educational Research and Improvement NCES, Room 410c 555 New Jersey Avenue NW Washington, DC 20208-5651 (202) 219-1364 E-mail: gmalitz@inet.ed.gov

### Northwest Regional Educational Laboratory (NWREL)

NWREL identifies effective teaching techniques and school improvement efforts within the region and shares this information with State and local educators.

Ethel Simon-McWilliams, Executive Director Northwest Regional Educational Laboratory 101 SW Main Street, Suite 500 Portland, OR 97204-3212 (503) 275-9500 / Fax: (503) 275-9489 WWW: http://www.nwrel.org

#### Science and Mathematics Consortium for Northwest Schools

The Eisenhower Regional Consortium provides information and technical assistance to help States and school districts improve mathematics and science education.

Dr. Ralph T. Nelsen, Director
Science and Mathematics Consortium for
Northwest Schools (SMCNWS)
Columbia Education Center
171 NE 102nd Avenue
Portland, OR 97220-4169
(503) 252-4999 / Fax: (503) 252-4866
E-mail: 76106.3006@compuserve.com
WWW: http://www.col-ed.org/smcnws/

#### ▶ Department of Energy (DOE)

#### **Bonneville Power Administration**

The administration participates in a broad range of education programs in its service territory (Washington, Oregon, Idaho, and Western Montana). Various programs available for teachers and students include math and science enhancements, hands-on learning, work-site mentoring and apprenticeships, competitions, environmental education, tutoring, and others. Projects involve several business, schools, and government agency partnerships. Many employees volunteer each year for various programs.

Joan McNamara, Community Education Coordinator Bonneville Power Administration PO Box 3621 Routing APPP Portland, OR 97208-3621 (503) 230-3709 / Fax: (503) 230-5884 E-mail: jhmcnamara@bpa.gov

#### Western Area Power Administration (WAPA)

Each February, WAPA conducts the Montana Regional Science Bowl, a community and Department-sponsored academic competition encouraging the study and pursuit of science and mathematics education and careers. The competition is focused to include participating Native American and other minority students from the State of Montana. The regional winner advances to the National competition, held in Washington, DC, each April.

Charles Sweeney Western Area Power Administration PO Box 35800 Billings, MT 59107-5800 (406) 247-7402

Gayle Nansel Western Area Power Administration-Billings PO Box 35800 Billings, MT 59107-5800 (406) 247-7437 / Fax: (406) 247-7393

#### ▶ Department of the Interior (DOI)

### Bighorn Canyon National Recreation Area

Programs, including guided walks and teacher guides, focus primarily on the ecology of the canyon.







Division of Interpretation Bighorn Canyon National Recreation Area PO Box 458 Fort Smith, MT 59035 (406) 666-2412

#### **Bozeman Fish Technology Center**

Expanding Your Horizons introduces middle school and junior high girls to careers in fish and wildlife biology. Participants are encouraged to take math and science courses throughout high school.

Fish Necropsy provides instruction on conducting a fish necropsy, including gross internal and external and sample collection.

Elizabeth Mac Copnnell, Fishery Biologist Bozeman Fish Technology Center 4050 Bridger Canyon Road Bozeman, MT 59715-8713 (406) 587-9265 / Fax: (406) 586-5942 E-mail: r6fa\_boz@mail.fws.gov

### **Bureau of Land Management State Office**

This office provides information about educational programs, materials, and local land-management issues.

Education Coordinator Bureau of Land Management PO Box 36800 222 North 32nd Street Billings, MT 59107 (406) 255-2827

### Bureau of Land Management, Miles City

National Fishing Week is celebrated with a one-half day event in which BLM staff and volunteers teach children aged 6–12 about fishing techniques, water safety, fish identification, and knot tying. Local and National sponsors provide approximately \$800 in prizes.

David Squires, Outdoor Recreation Planner PO Box 940 Miles City, MT 59301 (406) 232-4331 / Fax: (406) 232-4331

#### **Bureau of Reclamation**

Environmental education on a variety of subjects is offered to teachers and students in grades K-12. Emphasis is on water resources; subjects vary from groundwater model to instant snow storms and wetlands in a pan. Programs are presented in the classroom as well as outdoors at laboratory schools, summer camps, and at some visitor centers. The program currently operates in the States of California, Colorado, Montana, Nevada, Idaho, and Utah.

Theresa Taylor, Environmental Education Program Assistant Denver Federal Center, D-5100 Building 67 Denver, CO 80225 (303) 236-9336 ext. 262 Fax: (303) 236-3573

#### Bureau of Reclamation, Montana Area Office (MTAO)

MTAO has an active public archaeology program for groups of all ages, from preschool to senior citizens. Talks on various aspects of archaeology are presented along with slides or videos. Hands-on activities are also provided for school-age children. Among these activities are interactive video question and answer programs, puzzles, "sand-box" mock archaeology sites, and mind games. The MTAO provides the programs on requests from schools and civic groups.

Passport in Time is part of the Gibson Archaeological Project, cosponsored by the Montana Area Office of the Bureau of Reclamation and the Lewis and Clark National Forest. The purposes of the project are 1) to inventory and evaluate cultural resources adjacent to the Gibson Reservoir withdrawn lands; and 2) to provide an opportunity for volunteers to work directly with professional archaeologists in archaeological investigations and cultural resources management. The field work takes place for two weeks in September each year. Volunteers and staff live and work in the field camp in the northern Rocky Mountains of Montana.

Mike Andrews, Archaeologist Montana Area Office PO Box 30137 Billings, MT 59107 (406) 657-6489 / Fax: (406) 657-6089

### Canyon Ferry Limnilogical Institute (CFLI)

A science education program is offered by private nonprofit corporations that collaborate to form the institute. The Department of Reclamation supports the effort by providing facilities for their use.

In Water Monitoring and Management, personnel visit schools and public events and demonstrate how field data are collected at remote sites, transmitted to a satellite 20,000 miles away, and used in an office setting to make timely and accurate decisions involving water supply.

Katherine Jabs, Area Manager PO Box 30137 Great Plains, MT 59107-0137 (406) 247-7298 / Fax: (406) 657-6089

#### **DOI, Montana State Office**

In the Animal Inn/Sammy Snag program, a costumed presenter tells a story about the creatures that live in dead trees/snags. The one-hour presentation uses stuffed toy animals to demonstrate habitat. Students are involved when Sammy Snag solicits questions from the audience.

NILE (Northern International Livestock Exposition) Agricultural Classroom includes presentations covering various topics, such as Good Fire/Bad Fire, Mining & Minerals, and Wild Horses. Visual aids are used along with demonstrations and projects for students to do when they return to their classrooms. The target audience is fourth graders from areas surrounding Billings, Montana. During the three-day session more than 1,600 students attend the exposition.

Lorrene Schardt, Environmental Education Coordinator PO Box 36800 Billings, MT 59107 (406) 255-2827 / Fax: (406) 255-2898

#### **Glacier National Park**

The park offers environmental education field trips, guided tours, and other activities. Curriculum materials are available.

The Parks as Classrooms Program is designed to provide students, grades 1–6, with an introduction to the biological and cultural diversity of the park through a series of hands-on activities conducted in the classroom and the park. Individual units deal with habitat awareness, forest diversity, aquatic ecosystems, the alpine environment, and human relationships to the land.

L. Joe Decker, West Lakes District Naturalist Glacier National Park West Glacier, MT 59936 (406) 888-5441, ext. 304 Fax: (406) 888-5581

East side of Glacier:

Hudson Bay District Interpreter Glacier National Park St. Mary, MT 59417 (406) 732-4421

### Lee Metcalf National Wildlife Refuge

The Refuge offers teacher workshops to give teachers ideas, materials, and methods for teaching about natural resources, and to provide teachers with resource people and materials for teaching about the history and culture of people native to this area.



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Other programs include the following:

- ▶ Migratory Bird Days is a series of field day programs on migratory birds offered to the general public. Teachers, students, families, and naturalists are invited to participate in birding activities that include topics on adaptations, behavior, identification, migration, research, habitat needs, and conservation.
- The Statewide Junior Duck Stamp Contest, part of the Federal Junior Duck Stamp Program, is sponsored for K-12 school children. Children enter their artwork of North American waterfowl into one of four grade categories. All participants are acknowledged and winners are recognized at the Spring Awards Ceremony. The program promotes "Conservation through the Arts" and encourages young wildlife artists.

Beth Underwood, Park Ranger Lee Metcalf NWR PO Box 257 Stevensville, MT 59870 (406) 777-5552 / Fax: (406) 777-2498

#### **National Bison Range**

The range offers a variety of environmental education activities for students and an outdoor education resource library.

Programs include the following:

- ▶ Discovery Workshops for Teachers are presented in the spring and fall for teachers at all grade levels and disciplines. Fall workshops teach methods for teachers without science backgrounds. Spring workshops are more science based. Special workshops are held for schools with particular needs. Schools with nature centers or those planning one are provided with design assistance and advice.
- The Program for Schools and People with Disabilities consists of special sessions for visiting school groups, including learning disabled students and a special ACCESS program for people with disabilities. Summer day camps include other organizations that hold camps onsite.

Marcy Bishop, Outdoor Recreation Planner National Bison Range 132 Bison Range Road Moiese, MT 59824 (406) 644-2211 / Fax: (406) 644-2661

#### **Project WILD**

Project WILD offers teacher training and educational materials. Teacher guides, free to teachers who attend the training session, contain more than 80 supplementary, interdisciplinary activities for grades K-12.

Kurt Cunningham, Project WILD Coordinator Department of Fish, Wildlife, and Parks 1420 East Sixth Avenue Helena, MT 59620

(406) 444-1267 / Fax: (406) 444-4952

#### **Water Conservation Center**

The center sponsors a Water Education Calendar and Poster Contest that results in a regional calendar produced in cooperation with the International Office of Water Education and Utah State University. The calendar highlights winners of State poster contests that emphasize water resource issues. The calendar is published and distributed to all elementary schools throughout Idaho, Washington, Oregon, Montana, Alaska, and

Debbie Cross, Public Affairs Officer Water Conservation Center PN-6430 North Curtis Road Boise, ID 83705 (208) 378-5020 / Fax: (208) 378-5066

#### **▶** Department of Labor (DOL)

#### Job Training Partnership Act (JTPA) Liaison

The JTPA Liaison can provide information about the Job Training Partnership Act State and local programs for economically disadvantaged adults and youth.

Ingrid Danielson, Bureau Chief State Training Bureau Montana Department of Labor and Industry PO Box 1728 Helena, MT 59624 (406) 444-4500 / Fax: (406) 444-2638

#### **▶** Department of Transportation (DOT)

#### **Federal Aviation Administration** (FAA) Aviation Education

The FAA Aviation Education Representative coordinates aviation education services, including materials and programs for the FAA in the States assigned to the region.

Programs include the following:

The Aviation Career Education (ACE) Academy is a one-week summer aviation education program for high school students sponsored by the FAA along with a host educational institution. The program

provides students with diverse experiences in aviation career exploration. The focus is on aviation career clusters identified by FAA, with an emphasis on opportunities for women and minorities. A goal is to have one program in each State and U.S. Territory. The FAA will conduct regional leadership workshops and provide funds based on the availability of resources.

- Aviation Education Workshops for Teachers provide teachers with information on FAA aviation programs and materials and prepare them to teach aviation in the classroom. Annual workshops are conducted at colleges and universities across the Nation. The FAA provides information, materials, and speakers for the program.
- National Congress on Aviation and Space Education is sponsored annually by the FAA in partnership with the National Aeronautics and Space Administration and the Civil Air Patrol. The meeting includes teacher workshops and crosstalk sessions to exchange ideas on promoting aerospace education.

Herman Payton, ANM-14A, FAA Aviation Education Representative 1601 Lind Avenue SW Renton, WA 98055-4056 (206) 227-2079 / Fax: (206) 227-1010

#### **FAA Aviation Education Resource Centers**

Located at colleges, museums, and State aviation authority offices, these centers function as information distribution centers for Federal Aviation Administration education materials and resources. The Resource Centers maintain and provide quantities of printed materials, videotapes, and computer educational software. Center personnel can also provide general information, conduct workshops, and make aviation-related presentations.

Michael D. Ferguson Aviation Education Resource Center Montana DOT Aeronautics Division PO Box 5178 Helena, MT 59601 (406) 444-2506

#### **▶** Environmental Protection Agency (EPA)

#### **EPA** Regional Office

This office takes part in a variety of environmental education programs for both teachers and students. Programs range from teacher workshops and student contests to in-school



presentations. Information on environmental issues is also available through the Public Information Center located at the office.

Cece Forget, Environmental Education Coordinator Environmental Protection Agency One Denver Place (OCPI) 999 18th Street, Suite 500 Denver, CO 80202-2405 (303) 312-6605 / Fax: (303) 312-6961

### The President's Environmental Youth Awards (PEYA) Program

Young people from each State are invited to participate in PEYA, a nationwide program designed to encourage individuals, school classes, summer camps, public interest groups, and youth organizations to promote environmental awareness and community involvement. The two components of the program are the regional certificate program and the National awards competition. Regional certificates, signed by the President, are awarded to each participant by EPA regional offices. National individual project winners, or one representative from a National awardwinning group project, along with one sponsor, are honored at EPA headquarters in Washington, DC. Interested K-12 individuals or groups may obtain application materials and contest rules by contacting the EPA Regional Office that serves their State. PEYA has been an ongoing project since it was created by the White House Office of Education and the EPA in 1971.

EPA Region 8 999 18th Street Denver, CO 80202-2466 (303) 312-6605 / Fax: (303) 312-6961

#### ▶ National Aeronautics and Space Administration (NASA)

#### **NASA Educator Resource Center**

The center has NASA-related educational materials in various formats, including laserdiscs, CD-ROMs, videotapes, slides, audiotapes, publications, and teacher guides. Educators may preview or copy NASA materials upon request.

NASA Ames Research Center Educator Resource Laboratory Educator Resource Center, MS T12-A Moffett Field, CA 94035-1000 (415) 604-3574

#### **NASA Field Centers**

Each field center has an educational programs officer who is responsible for precol-

lege education programs. In addition to administering National programs, the center offers programs and services to meet regional and local needs.

Garth A. Hull, Chief Educational Programs Branch NASA Ames Research Center Mail Stop 204-12 Moffett Field, CA 94035 (415) 604-5543

#### NASA Regional Educator Resource Center (RERC)

To offer more educators the opportunity to visit the Educator Resource Center Network (ERCN), NASA forms partnerships with planetariums, universities, museums, and other nonprofit organizations to serve as RERCs. Teachers may preview or copy NASA materials upon request.

Western Montana College of the University of Montana

NASA Regional Educator Resource Center Carson Library 710 South Atlantic Dillon, MT 59725 (406) 683-7541

#### **Space Grant Consortium**

The Space Grant Consortium in each State consists of colleges, universities, industry, and other organizations that have an interest in aeronautics and space education. Each consortium receives NASA funds for use in implementing a balanced program of research, education, and public service.

Montana Space Grant Consortium Montana State University AJM Johnson Hall Bozeman, MT 59717-0350 (406) 994-6170

### Oregon

## ► Department of Agriculture (USDA)

#### 4-H State Leader

The State 4-H Youth Development Programs are administered by the Cooperative Extension Service at land-grant universities. State 4-H leaders coordinate outreach services and training to all county offices.

Dr. James Rutledge, Interim State 4-H Leader Ballard Extension Hall 105 Oregon State University Corvallis, OR 97331-3608 (503) 737-2421 / Fax: (541) 737-1332 E-mail: rutledgj@oes.orst.edu

#### Ag in the Classroom State Leader

This program promotes increased understanding of agriculture and possible careers in the agricultural sciences. With National leadership provided by USDA, each State manages its own programs, with assistance from agribusiness, educational institutions, and government.

Mary Steward Agri-Business Council 1200 NW Front Avenue, Suite 290 Portland, OR 97209-2800 (503) 221-8756

## Department of Commerce (DOC)

#### National Oceanic and Atmospheric Administration (NOAA)

The administration coordinates agency-wide efforts to educate the public about Earth-systems science and to increase awareness of the Agency's mission. The Teacher-at-Sea Program provides teachers (K–16, any subject) the opportunity to participate in a field research project along with NOAA scientists aboard a NOAA research vessel.

Judy Sohl, Educational Affairs Office National Oceanic and Atmospheric Administration 7600 Sand Point Way NE Seattle, WA 98115-0070 (206) 526-6622 / Fax: (206) 526-6609

#### National Sea Grant College Program, Operation Pathfinder

The program consists of two-week summer courses that present an introduction to oceanographic and coastal processes. Courses are available in six regions and are designed to enhance skills in science teaching.

Michael Spranger Washington Sea Grant University of Washington, HG-3 3716 Brooklyn Avenue NE Seattle, WA 98105-6716 (206) 543-6600 / Fax: (206) 685-0380

### South Slough National Estuarine Research Reserve

The reserve offers onsite and in-school educa-



**BEST COPY AVAILABLE** 

tion programs, as well as custom educational programs. Reservations are required.

Tom Gaskill, Education Coordinator South Slough National Estuarine Research Reserve PO Box 5417 Charleston, OR 97420 (541) 888-5558 / Fax: (541) 888-5559

## ► Department of Education (ED)

#### **Eisenhower State Coordinators**

Eisenhower State Coordinators administer the Eisenhower Professional Development Program State Formula grants. The program focuses on sustained and intensive high-quality professional development through inservice programs.

Wanda Monthey
Eisenhower Mathematics and Science
Program
Oregon Department of Education
255 Capitol Street NE
Salem, OR 97310-0203
(503) 378-8004, ext. 257
Fax: (503) 378-7968

### **Eisenhower State Coordinators** for Higher Education

Eisenhower State Coordinators oversee the Eisenhower Professional Development State Formula Grants for the State Agency for Higher Education (SAHE). The program focuses on teacher enhancement through both inservice and preservice programs.

Dr. Holly Zanville
Eisenhower Professional Development
Program
Oregon Department of Education
PO Box 3175
Eugene, OR 97403
(503) 346-5726 / Fax: (503) 346-5764

### Northwest Educational Technology Consortium (NETC)

ED established the Regional Technology in Education Consortia (R\*TEC) program in the fall of 1995 to help States, districts, schools, adult literacy centers, and other educational institutions use advanced technology to support improved teaching and student achievement. R\*TEC's role in educational technology is unique in two ways: the emphasis is regional and the primary goal is to ensure that technology is used effectively to support school reform. R\*TEC program strategies include professional development, technical assistance, and information dissemination.

Seymour Hanfling, Director Technology Program NETC 101 SW Main Street, Suite 500

Portland, OR 97204-3297 (503) 275-9500 / Fax: (503) 275-9584

E-mail: hanflins@nwrel.org WWW: http://www.netc.org

Gerald Malitz, R\*TEC Project Officer U.S. Department of Education Office of Educational Research and Improvement NCES, Room 410c 555 New Jersey Avenue NW Washington, DC 20208-5651 (202) 219-1364 E-mail: gmalitz@inet.ed.gov

### Northwest Regional Educational Laboratory (NWREL)

NWREL identifies effective teaching techniques and school improvement efforts within the region and shares this information with State and local educators.

Ethel Simon-McWilliams, Executive Director Northwest Regional Educational Laboratory 101 SW Main Street, Suite 500 Portland, OR 97204-3212 (503) 275-9500 / Fax: (503) 275-9489 WWW: http://www.nwrel.org

#### Science and Mathematics Consortium for Northwest Schools

The Eisenhower Regional Consortium provides information and technical assistance to help States and school districts improve mathematics and science education.

Dr. Ralph T. Nelsen, Director Science and Mathematics Consortium for Northwest Schools (SMCNWS) Columbia Education Center 171 NE 102nd Avenue Portland, OR 97220-4169 (503) 252-4999 / Fax: (503) 252-4866 E-mail: 76106.3006@compuserve.com WWW: http://www.col-ed.org/smcnws/

#### ▶ Department of Energy (DOE)

#### **Bonneville Power Administration**

The administration participates in a broad range of education programs in its service territory (Washington, Oregon, Idaho, and Western Montana). Various programs available for teachers and students include math and science enhancements, hands-on learning, work-site mentoring and apprenticeships, competitions, environmental education, tutor-

ing, and others. Projects involve several business, schools, and government agency partnerships. Many employees volunteer each year for various programs.

Joan McNamara, Community Education Coordinator Bonneville Power Administration PO Box 3621 Routing APPP Portland, OR 97208-3621 (503) 230-3709 / Fax: (503) 230-5884 E-mail: jhmcnamara@bpa.gov

## ► Department of the Interior (DOI)

### **Bureau of Land Management State Office**

This office provides information about educational programs, materials, and local land-management issues.

Education Coordinator Bureau of Land Management PO Box 2965, 1300 NE 44th Avenue Portland, OR 97208-2965 (503) 280-7287

#### **Crater Lake National Park**

Guided nature walks focus on geology and environmental education. Educational Outreach includes Nationally available resources such as lesson plans, a teacher newsletter, and video loans. Educators in the region can participate in teacher workshops. Locally, educational services and classroom presentations are also available.

Marianne Mills, Assistant Chief Crater Lake National Park Interpretive and Cultural Resource Manager Box 7 Crater Lake, OR 97604 (503) 594-2211 Fax: (503) 594-2299

### John Day Fossil Beds National Monument

Guided walks and lectures focus on the monument's paleontology and geology. A demonstration laboratory is available. Two science programs are offered, one featuring geology for fifth and sixth grade students and the other featuring paleontology for seventh and eighth grade students. Programs are designed to meet the Oregon Department of Education Science Curriculum goals.

John Fiedor, Park Ranger John Day Fossil Beds National Monument 420 West Main Street John Day, OR 97845 (503) 987-2333 / Fax: (503) 987-2336



### Oregon Caves National Monument

Teacher's Guide to Caves and Serpentine Plants is a 260-page resource including seven lesson plans, reference appendices, and slides. Each lesson plan includes pre- and post-site classroom activities and field trip descriptions. Field trips are led by park rangers when they are available. The guide covers subjects such as endemic plants, cave formations, and bats.

Sheri Forbes, Chief of Interpretation Oregon Caves National Monument 19000 Caves Highway Cave Junction, OR 97523 (503) 592-2100 / Fax: (503) 592-3981

#### **Project WILD**

Project WILD offers teacher training and educational materials. Teacher guides, free to teachers who attend the training session, contain more than 80 supplementary, interdisciplinary activities for grades K-12.

Shann Weston, Project WILD Coordinator Oregon Department of Fish and Wildlife PO Box 59 Portland, OR 97207 (503) 229-5410, ext. 427 Fax: (503) 229-5602

#### **Travis Tyrrell Seed Orchard**

The orchard is at the center of Bureau of Land Management's forestry genetics and tree improvement program. The facility is located southwest of Eugene in the Coast Range Mountains. Orchard staff make presentations on genetics and tree improvement. Groups can tour the facility to get a firsthand view of a working seed orchard. The facility also has an interpretive hiking trail that allows opportunities for plant identification and wildlife viewing.

Glenn Miller, Seed Orchard Manager Bureau of Land Management Eugene District 2890 Chad Drive Eugene, OR 97408 (541) 683-6445 / Fax: (541) 683-6597

#### **Water Conservation Center**

The center sponsors a Water Education Calendar and Poster Contest that results in a regional calendar produced in cooperation with the International Office of Water Education and Utah State University. The calendar highlights winners of State poster contests that emphasize water resource issues. The calendar is published and distributed to all elementary schools throughout Idaho, Washington, Oregon, Montana, Alaska, and Hawaii.

Debbie Cross, Public Affairs Officer Water Conservation Center PN-6430 North Curtis Road Boise, ID 83705 (208) 378-5020 / Fax: (208) 378-5066

## ► Department of Labor (DOL)

### Job Training Partnership Act (JTPA) Liaison

The JTPA Liaison can provide information about the Job Training Partnership Act State and local programs for economically disadvantaged adults and youth.

William Easly, Manager Business Resources Division Oregon Economic Development Department 775 Summer Street NE Salem, OR 97310 (503) 373-1995 / Fax: (503) 581-5115

## ► Department of Transportation (DOT)

### Federal Aviation Administration (FAA) Aviation Education

The FAA Aviation Education Representative coordinates aviation education services, including materials and programs for the FAA in the States assigned to the region.

Programs include the following:

- The Aviation Career Education (ACE)
  Academy is a one-week summer aviation
  education program for high school students sponsored by the FAA along with a
  host educational institution. The program
  provides students with diverse experiences
  in aviation career exploration. The focus
  is on aviation career clusters identified by
  FAA, with an emphasis on opportunities
  for women and minorities. A goal is to
  have one program in each State and U.S.
  Territory. The FAA will conduct regional
  leadership workshops and provide funds
  based on the availability of resources.
- Aviation Education Workshops for Teachers provide teachers with information on FAA aviation programs and materials and prepare them to teach aviation in the classroom. Annual workshops are conducted at colleges and universities across the Nation. The FAA provides information, materials, and speakers for the program.

▶ National Congress on Aviation and Space Education is sponsored annually by the FAA in partnership with the National Aeronautics and Space Administration and the Civil Air Patrol. The meeting includes teacher workshops and crosstalk sessions to exchange ideas on promoting aerospace education.

Herman Payton, ANM-14A, FAA Aviation Education Representative 1601 Lind Avenue SW Renton, WA 98055-4056 (206) 227-2079 / Fax: (206) 227-1010

### FAA Aviation Education Resource Centers

Located at colleges, museums, and State aviation authority offices, these centers function as information distribution centers for Federal Aviation Administration education materials and resources. The Resource Centers maintain and provide quantities of printed materials, videotapes, and computer educational software. Center personnel can also provide general information, conduct workshops, and make aviation-related presentations.

Elizabeth Johnson Oregon Department of Transportation Aeronautics Division 3040 25th Street SE Salem, OR 97310-0100 (503) 378-4882

## ► Environmental Protection Agency (EPA)

### Environmental Research Laboratory

The Environmental Research Laboratory manages a curriculum development program in addition to a student-scientist mentor program and an outreach lecture series. Other programs include science fairs and Laboratory tours.

U.S. Environmental Protection Agency Environmental Research Laboratory 200 SW 35th Street Corvallis, OR 97333 (503) 754-4684

#### **EPA** Regional Office

This office takes part in a variety of environmental education programs for both teachers and students. Programs range from teacher workshops and student contests to in-school presentations. Information on environmental issues is also available through the Public Information Center located at the office.



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Sally Hanft, Environmental Education Coordinator Environmental Protection Agency 1200 Sixth Avenue (EXA-142) Seattle, WA 98101 (206) 553-1207 / Fax: (206) 553-0149

#### The President's Environmental Youth Awards (PEYA) Program

Young people from each State are invited to participate in PEYA, a nationwide program designed to encourage individuals, school classes, summer camps, public interest groups, and youth organizations to promote environmental awareness and community involvement. The two components of the program are the regional certificate program and the National awards competition. Regional certificates, signed by the President, are awarded to each participant by EPA regional offices. National individual project winners, or one representative from a National awardwinning group project, along with one sponsor, are honored at EPA headquarters in Washington, DC. Interested K-12 individuals or groups may obtain application materials and contest rules by contacting the EPA Regional Office that serves their State. PEYA has been an ongoing project since it was created by the White House Office of Education and the EPA in 1971.

EPA Region 10 1200 Sixth Avenue Seattle, WA 98101 (800) 424-4EPA

(206) 553-1207 / Fax: (206) 553-0149

#### ▶ National Aeronautics and **Space Administration** (NASA)

#### **NASA Educator Resource Center**

The center has NASA-related educational materials in various formats, including laserdiscs, CD-ROMs, videotapes, slides, audiotapes, publications, and teacher guides. Educators may preview or copy NASA materials upon request.

NASA Ames Research Center Educator Resource Laboratory Educator Resource Center, MS T12-A Moffett Field, CA 94035-1000 (415) 604-3574

#### **NASA Field Centers**

Each field center has an educational programs officer who is responsible for precollege education programs. In addition to administering National programs, the center offers programs and services to meet regional and local needs.

Garth A. Hull, Chief Educational Programs Branch NASA Ames Research Center, MS 204-12 Moffett Field, CA 94035 (415) 604-5543

#### **NASA** Regional Educator Resource Center (RERC)

To offer more educators the opportunity to visit the Educator Resource Center Network (ERCN), NASA forms partnerships with planetariums, universities, museums, and other nonprofit organizations to serve as RERCs. Teachers may preview or copy NASA materials upon request.

Oregon Museum of Science and Industry NASA Regional Educator Resource Center 1945 SE Water Avenue Portland, OR 97214-3354 (503) 797-4579

#### **Space Grant Consortium**

The Space Grant Consortium in each State consists of colleges, universities, industry, and other organizations that have an interest in aeronautics and space education. Each consortium receives NASA funds for use in implementing a balanced program of research, education, and public service.

Oregon Space Grant Consortium Department of Nuclear Engineering Radiation Center C116 Oregon State University Corvallis, OR 97331-5902 (503) 737-2414

### Washington

#### **▶** Department of Agriculture (USDA)

#### 4-H State Leader

The State 4-H Youth Development Programs are administered by the Cooperative Extension Service at land-grant universities. State 4-H leaders coordinate outreach services and training to all county offices.

Dr. Patricia Boyes, Interim Assistant Director, 4-H Washington State University-Puyallup Center 7612 Pioneer Way East Puvallup, WA 98371-4998 (206) 840-4589 / Fax: (206) 840-4671 E-mail: boyes@wsuvm1.csc.wsu.edu

#### Ag in the Classroom State Leader

This program promotes increased understanding of agriculture and possible careers in the agricultural sciences. With National leadership provided by USDA, each State manages its own programs, with assistance from agribusiness, educational institutions, and government.

Shan Schnebly Washington Ag in the Classroom PO Box 786 Ellensburg, WA 98926-0786 (509) 962-4134

Doug Hassien PO Box 4256 Olympia, WA 98504-2560 (206) 902-1940

#### **▶** Department of Commerce (DOC)

#### National Oceanic and **Atmospheric Administration** (NOAA)

NOAA coordinates agency-wide efforts to educate the public about Earth-systems science and to increase awareness of the Agency's mission. The Teacher-at-Sea Program provides teachers (K-16, any subject) the opportunity to participate in a field research project along with NOAA scientists aboard a NOAA research vessel.

Judy Sohl, Educational Affairs Office National Oceanic and Atmospheric Administration 7600 Sand Point Way NE Seattle, WA 98115-0070 (206) 526-6622 / Fax: (206) 526-6609

#### National Sea Grant College Program, Operation Pathfinder

The program consists of two-week summer courses that present an introduction to oceanographic and coastal processes. Courses are available in six regions and are designed to enhance skills in science teaching.

Michael Spranger Washington Sea Grant University of Washington, HG-3 3716 Brooklyn Avenue NE Seattle, WA 98105-6716 (206) 543-6600 / Fax: (206) 685-0380

#### Padilla Bay National Estuarine Research Reserve

The reserve offers both onsite and in-school education programs.



Glen Alexander, Education Coordinator Padilla Bay National Estuarine Research Reserve 1043 Bayview-Edison Road Mount Vernon, WA 98273

(360) 428-1558 / Fax: (360) 428-1491

#### **▶** Department of Defense (DoD)

#### Naval Submarine Base, Bangor

The base participates in the Navy Community Service Program through formation of partnerships with schools and other youth organizations throughout the area. The commander of Submarine Group Nine coordinates regional partnerships. The commander of Submarine Base, Bangor, is the local coordinator for projects in Bangor and Silverdale.

COMSUBASE, Bangor Commander Submarine Base, Bangor 1100 Humley Road Silverdale, WA 98315-1199 (206) 396-4840

COMSUBGRU NINE Commander Submarine Group Nine 2150 Thresher Avenue Code N-33 Silverdale, WA 98315-2150 (206) 396-6095 or 6118

#### Naval Undersea Museum

The museum presents exhibits and educational programs that explain the sciences and technologies employed under the sea. Tours and educational programs are available upon request.

Naval Undersea Museum 610 Dowell Street Keyport, WA 98345-7610 (360) 396-4148, ext. 201

#### **▶**Department of Education (ED)

#### **Eisenhower State Coordinators**

Eisenhower State Coordinators administer the Eisenhower Professional Development Program State Formula grants. The program focuses on sustained and intensive high-quality professional development through inservice programs.

Peggy Vatter Eisenhower Professional Development Program Office of the Superintendent of Public Instruction PO Box 47200, Old Capitol Building Olympia, WA 98504-7200

#### **Eisenhower State Coordinators** for Higher Education

(360) 753-6757 / Fax: (360) 753-6754

Eisenhower State Coordinators oversee the Eisenhower Professional Development State Formula Grants for the State Agency for Higher Education (SAHE). The program focuses on teacher enhancement through both inservice and preservice programs.

David Kennedy Eisenhower Professional Development Program Office of the Superintendent of Public Instruction PO Box 47200, Old Capitol Building Olympia, WA 98504-7200 (360) 753-6727 / Fax: (360) 753-6754

#### **Northwest Educational** Technology Consortium (NETC)

ED established the Regional Technology in Education Consortia (R\*TEC) program in the fall of 1995 to help States, districts, schools, adult literacy centers, and other educational institutions use advanced technology to support improved teaching and student achievement. R\*TEC's role in educational technology is unique in two ways: the emphasis is regional and the primary goal is to ensure that technology is used effectively to support school reform. R\*TEC program strategies include professional development, technical assistance, and information dissemination.

Seymour Hanfling, Director Technology Program **NETC** 101 SW Main Street, Suite 500 Portland, OR 97204-3297 (503) 275-9500 / Fax: (503) 275-9584 E-mail: hanflins@nwrel.org WWW: http://www.netc.org

Gerald Malitz, R\*TEC Project Officer U.S. Department of Education Office of Educational Research and Improvement NCES, Room 410c 555 New Jersey Avenue NW Washington, DC 20208-5651 (202) 219-1364 E-mail: gmalitz@inet.ed.gov

#### Northwest Regional Educational Laboratory (NWREL)

NWREL identifies effective teaching techniques and school improvement efforts within the region and shares this information with State and local educators.

Ethel Simon-McWilliams, Executive Director Northwest Regional Educational Laboratory 101 SW Main Street, Suite 500 Portland, OR 97204-3212 (503) 275-9500 / Fax: (503) 275-9489 WWW: http://www.nwrel.org

#### Science and Mathematics **Consortium for Northwest** Schools

The Eisenhower Regional Consortium provides information and technical assistance to help States and school districts improve mathematics and science education.

Dr. Ralph T. Nelsen, Director Science and Mathematics Consortium for Northwest Schools (SMCNWS) Columbia Education Center 171 NE 102nd Avenue Portland, OR 97220-4169 (503) 252-4999 / Fax: (503) 252-4866 E-mail: 76106.3006@compuserve.com WWW: http://www.col-ed.org/smcnws/

#### ▶ Department of Energy (DOE)

#### **Bonneville Power Administration**

The administration participates in a broad range of education programs in its service territory (Washington, Oregon, Idaho, and Western Montana). Various programs available for teachers and students include math and science enhancements, hands-on learning, work-site mentoring and apprenticeships, competitions, environmental education, tutoring, and others. Projects involve several business, schools, and government agency partnerships. Many employees volunteer each year for various programs.

Joan McNamara, Community Education Coordinator Bonneville Power Administration PO Box 3621 Routing APPP Portland, OR 97208-3621 (503) 230-3709 / Fax: (503) 230-5884 E-mail: jhmcnamara@bpa.gov

#### **Pacific Northwest National** Laboratory (PNNL)

University and Science Education Programs conducted by PNNL use the science-rich human and technical resources of a National



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laboratory to enhance National, regional, and local efforts to provide high-quality mathematics, science, and technology education for all students. A comprehensive array of programs provide teacher preparation and enhancement, curriculum development and dissemination, student incentives and opportunities, and State and regional partnerships. University and Science Education Programs support education reform throughout the State and region in mathematics, science, and technology education.

Jeff Estes, Deputy Manager University and Science Education Programs Pacific Northwest National Laboratory PO Box 999, MS K1-22 Richland, WA 99352 (509) 375-2820 / Fax: (509) 375-2576 E-mail: jc\_estes@pnl.gov

#### **Regional Science Bowl**

The DOE sponsors a Regional Science Bowl for Washington State high schools in the Tricities area. This is a public/private-sponsored academic competition held each February that encourages the study of science and mathematics and the pursuit of related careers. The regional winner advances to the National competition held each spring.

Bartley Fain Human Resources Division Richland Operations Office PO Box 550 Richland, WA 99352 (509) 376-8088 / Fax: (509) 376-5335

#### ▶ Department of the Interior (DOI)

### **Bureau of Land Management State Office**

This office provides information about educational programs, materials, and local land-management issues.

Education Coordinator Bureau of Land Management PO Box 2965, 1300 NE 44th Avenue Portland, OR 97208-2965 (503) 280-7287

### Earth Science Information Center, Spokane

The center offers information and sales service for U.S. Geological Survey map products and Earth science publications.

Spokane Earth Science Information Center West 904 Riverside Avenue U.S. Post Office Building, Room 135 Spokane, WA 99201-1088 (509) 353-2524

#### **Mount Rainier National Park**

The park offers regularly scheduled guided nature walks and lectures about the park's ecology, environment, and geology. Where the River Begins is an educator's guide to the Nisqually River in the park. This interdisciplinary curriculum for grades K–12 is a cooperative program with the Nisqually River Education Project. A CD-ROM with the same title incorporates interactive animations, games, slides, and videos to enliven information about the natural and human history of the park.

Loren E. Lane, Resource Education Specialist Mount Rainier National Park Tahoma Woods, Star Route Ashford, WA 98304 (206) 569-2211, ext. 3313 Fax: (206) 569-2187

#### Nisqually National Wildlife Refuge

The education program informs the public (both children and adults) on National Wildlife Refuges and their role in the protection and preservation of wildlife and related habitats and resources. The variety of habitat and wildlife species at Nisqually NWR are featured.

Willard B. Hesselbart, Refuge Manager Nisqually NWR 100 Brown Farm Road Olympia, WA 98516 (360) 753-9467 / Fax: (360) 534-9302

#### Olympic National Park

The park offers teacher workshops, guided nature walks, and curriculum materials that can be used as guides to the park. Olympic also allows educators to borrow Discovery Trunks that contain educational materials and activities.

Living Forest (also referred to as The Park in Your Backyard) is designed to help students, teachers, and parents learn about and enjoy the lowland and old growth forests of Olympic National Park. The program includes a 180-page curriculum guide containing natural history information and activities for both the classroom and outdoors. Three educational trunks with learning materials and activity guides are available for teachers to check out and use for two-week periods. In addition, the park provides varied field trip opportunities, as well as several teacher workshops each year.

Education Coordinator Olympic National Park 600 East Park Avenue Port Angeles, WA 98362 (206) 452-4501, ext. 236 Fax: (206) 452-0307

#### **Project WILD**

Project WILD offers teacher training and educational materials. Teacher guides, free to teachers who attend the training session, contain more than 80 supplementary, interdisciplinary activities for grades K–12.

Margaret Tudor, Project WILD Coordinator Washington Department of Wildlife 600 Capitol Way North Olympia, WA 98501-1091 (206) 753-1702 / Fax: (206) 664-3515

### Ridgefield National Wildlife Refuge

The Environmental Education Program provides access to outdoor sites for local teachers to bring in their classes. Teachers provide activity planning and guidance in environmental education. The refuge staff provide scheduling to avoid conflicts and to arrange for an orientation by volunteers.

James R. Clapp, Refuge Operations Specialist Ridgefield NWR PO Box 457 Ridgefield, WA 98642 (360) 887-4106 / Fax: (360) 887-4109

#### **Water Conservation Center**

The center sponsors a Water Education Calendar and Poster Contest that results in a regional calendar produced in cooperation with the International Office of Water Education and Utah State University. The calendar highlights winners of State poster contests that emphasize water resource issues. The calendar is published and distributed to all elementary schools throughout Idaho, Washington, Oregon, Montana, Alaska, and Hawaii.

Debbie Cross, Public Affairs Officer Water Conservation Center PN-6430 North Curtis Road Boise, ID 83705 (208) 378-5020 / Fax: (208) 378-5066

## ► Department of Labor (DOL)

### Job Training Partnership Act (ITPA) Liaison

The JTPA Liaison can provide information about the Job Training Partnership Act State and local programs for economically disadvantaged adults and youth.



Larry A. Malo, Assistant Commissioner Training and Employment Analysis Division Washington Department of Employment Security

605 Woodview Drive SE, MS KG11 Olympia, WA 98504-5311 (206) 438-4611 / Fax: (206) 438-3174

## ► Department of Transportation (DOT)

### Federal Aviation Administration (FAA) Aviation Education

The FAA Aviation Education Representative coordinates aviation education services, including materials and programs for the FAA in the States assigned to the region.

Programs include the following:

- ▶ The Aviation Career Education (ACE)
  Academy is a one-week summer aviation
  education program for high school students sponsored by the FAA along with a
  host educational institution. The program
  provides students with diverse experiences
  in aviation career exploration. The focus
  is on aviation career clusters identified by
  FAA, with an emphasis on opportunities
  for women and minorities. A goal is to
  have one program in each State and U.S.
  Territory. The FAA will conduct regional
  leadership workshops and provide funds
  based on the availability of resources.
- ▶ Aviation Education Workshops for Teachers provide teachers with information on FAA aviation programs and materials and prepare them to teach aviation in the classroom. Annual workshops are conducted at colleges and universities across the Nation. The FAA provides information, materials, and speakers for the program.
- ▶ National Congress on Aviation and Space Education is sponsored annually by the FAA in partnership with the National Aeronautics and Space Administration and the Civil Air Patrol. The meeting includes teacher workshops and crosstalk sessions to exchange ideas on promoting aerospace education.

Herman Payton, ANM-14A, FAA Aviation Education Representative 1601 Lind Avenue SW Renton, WA 98055-4056 (206) 227-2079 / Fax: (206) 227-1010

### FAA Aviation Education Resource Centers

Located at colleges, museums, and State aviation authority offices, these centers function as information distribution centers for Federal Aviation Administration education materials and resources. The Resource Centers maintain and provide quantities of printed materials, videotapes, and computer educational software. Center personnel can also provide general information, conduct workshops, and make aviation-related presentations.

Gregory Moyce, Education Program Manager Aviation Education Resource Center Museum of Flight 9404 East Marginal Way South Seattle, WA 98108 (206) 764-5700

## ► Environmental Protection Agency (EPA)

#### **EPA** Regional Office

This office takes part in a variety of environmental education programs for both teachers and students. Programs range from teacher workshops and student contests to in-school presentations. Information on environmental issues is also available through the Public Information Center located at the office.

Sally Hanft, Environmental Education Coordinator Environmental Protection Agency 1200 Sixth Avenue (EXA-142) Seattle, WA 98101 (206) 553-1207 / Fax: (206) 553-0149

### The President's Environmental Youth Awards (PEYA) Program

Young people from each State are invited to participate in PEYA, a nationwide program designed to encourage individuals, school classes, summer camps, public interest groups, and youth organizations to promote environmental awareness and community involvement. The two components of the program are the regional certificate program and the National awards competition. Regional certificates, signed by the President, are awarded to each participant by EPA regional offices. National individual project winners, or one representative from a National awardwinning group project, along with one sponsor, are honored at EPA headquarters in Washington, DC. Interested K-12 individuals or groups may obtain application materials and contest rules by contacting the EPA

Regional Office that serves their State. PEYA has been an ongoing project since it was created by the White House Office of Education and the EPA in 1971.

EPA Region 10 1200 Sixth Avenue Seattle, WA 98101 (800) 424-4EPA (206) 553-1207 / Fax: (206) 553-0149

# ► National Aeronautics and Space Administration (NASA)

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NASA Ames Research Center Educator Resource Laboratory Educator Resource Center, MS T12-A Moffett Field, CA 94035-1000 (415) 604-3574

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Garth A. Hull, Chief Educational Programs Branch NASA Ames Research Center, MS 204-12 Moffett Field, CA 94035 (415) 604-5543

#### NASA Regional Educator Resource Center (RERC)

To offer more educators the opportunity to visit the Educator Resource Center Network (ERCN), NASA forms partnerships with planetariums, universities, museums, and other nonprofit organizations to serve as RERCs. Teachers may preview or copy NASA materials upon request.

University of Washington NASA Regional Educator Resource Center AK-50, c/o Geophysics Department Seattle, WA 98195 (206) 543-1943



#### **Space Grant Consortium**

The Space Grant Consortium in each State consists of colleges, universities, industry, and other organizations that have an interest in aeronautics and space education. Each consortium receives NASA funds for use in implementing a balanced program of research, education, and public service.

Washington Space Grant Consortium University of Washington Space Grant Box 351650 Seattle, WA 98195-1650 (206) 543-1943



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- ► American Samoa
- ▶ Commonwealth of the Northern Mariana Islands
- ▶ Federated States of Micronesia
- **▶** Guam
- ► Hawaii
- ▶ Republic of the Marshall Islands
- ▶ Republic of Palau



### Pacific Mathematics and Science Regional Consortium





### **Pacific Mathematics and Science** Regional Consortium

he Pacific Mathematics and Science Regional Consortium is one of 10 Eisenhower Mathematics and Science Regional Consortia established by the U.S. Department of Education. The National Network of Eisenhower Regional Consortia and the Eisenhower National Clearinghouse for Mathematics and Science Education (ENC) form a coordinated, field-based National infrastructure to promote systemic educational reform.

The Consortium serves 10 Pacific Island entities. Its mission is to support professional communities of educators and their partners as they work to improve mathematics and science teaching and learning. The Pacific Consortium believes the path to improvement in the classroom lies within and through teachers' professional communities, which generate knowledge, craft new standards, and sustain participants in their efforts to reflect, examine, experiment, and change. To this end, the Consortium focuses on providing technical assistance in implementation, innovation, and dissemination of exemplary materials, teaching strategies, and assessment resources for elementary and secondary students, teachers, and administrators.

Given the cultural, linguistic, economic, and environmental diversity of the Pacific region, and the geographic isolation of a significant number of the region's teachers, many of the projects and programs supported by the Pacific Consortium involve long-term and multiphase professional development that combines a variety of models: training, teacher-as-researcher study groups, teacher case studies, credit coursework, and a new educator-in-residence approach. Consortium support often incorporates a training-of-trainers model to ensure that local resources are available. It also makes use of local, regional, and National telecommunications networks and builds in local adaptations that recognize and celebrate the diversity that enriches Pacific education.

One major feature of the Pacific Consortium is the Mathematics and Science Leadership Team, which consists of mathematics and science specialists from each entity. The team is the core development and implementation group for all regional documents and projects carried out through the Consortium. It also

determines the kinds of activities to be carried out in the home entities of the team members, as well as supporting school-based initiatives through the Visions and Dreams Program for each entity's schools and teachers. The competition is funded through the Pacific Consortium. Below are some of the activities the Leadership Team has developed or is implementing across the region and within each entity.

#### **Pacific Consortium Regional Activities**

#### ► The Pacific Educational Conference

The Consortium uses this conference to highlight activities of interest to the region's educators, to disseminate information about the Consortium's regional and entity-specific projects, to demonstrate effective classroom practices and quality assessment strategies, and to distribute exemplary materials.

#### ► Support for Educational Initiatives

The Pacific Consortium supports regionwide and individual entity initiatives. It works in partnership with the University of Hawaii's Curriculum Research and Development Group (CRDG), whose staff support the work of the Leadership Team and provide training and technical assistance in implementing regionally and Nationally recognized courses and projects. In collaboration with the CRDG mathematics and science faculty, the team has developed Pacific Standards for Excellence in Mathematics, Pacific Standards for Excellence in Science, and Pacific Standards for Excellence in Teaching, Assessment, and Professional Development. These standards are appropriate for the region and aligned with world-class standards.

#### Networking

The Consortium is encouraging a network of teachers across the Pacific and beyond to share information, ideas, and projects via Far-Reaching Information Sharing (FISHnet).

#### Assessment Projects

The Yap Classroom Learning Assessment Project is a multiphase initiative addressing improvement in classroom assessment, curriculum, and instruction through training of trainers and direct teacher training. The Commonwealth of the Northern Mariana Islands (CNMI) Performance Assessment Project is similar to the Yap Project. Program managers in CNMI have formed a training team that is developing performance tasks, assessment criteria, and scoring rubrics.

#### The Guam Mathematics Project

This project involves teachers—one from each of Guam's 29 public elementary schools and middle schools—in learning how to teach and assess school mathematics for understanding. Ten of these teachers will receive additional staff development to become trainers within the local school district.

#### School/Community-Based Management (SCBM) Projects

Serving Hawaii schools, these projects involve Consortium staff and partners from the University of Hawaii in residence one to two days per month to provide focused technical assistance (developing curriculum, creating active learning environments, using heterogeneous work groups, and conducting classroom assessments) to small groups of teachers who plan and implement integrated thematic

The Pacific Consortium uses diverse resources to meet the needs of the region's mathematics and science educators. Voyages in Mathematics and Science is a quarterly teacher-oriented publication that emphasizes practical applications of quality mathematics and science strategies.

Another effort of the Pacific Consortium is to familiarize educators with technologies that can improve and enhance the teaching and learning of science and mathematics in the region's classrooms. The mechanism for this effort is the Pacific Regional Technology Demonstration Site, which was in Honolulu but has now begun to move to other locales in the region. The demonstration site is a multi-prong partnership among the ENC, Pacific Consortium, departments of education, and other educational institutions in the region.



Developed through the collaborative efforts of the 10 regional educational laboratories' Laboratory Networking Project (LNP), the Pacific Consortium provides exemplary resources for training in alternative assessment as well as in successful practices in mathematics and science education. A database, also developed through interlaboratory collaboration and housed at the Consortium, describes alternative assessments in mathematics and science. Printed copies are available.

Paul S. Dumas, Director

Kathy Busick, Program Specialist

Alice Borja, Program Specialist

Barbara Dougherty
Program Specialist

Pacific Mathematics and Science Regional Consortium Pacific Resources for Education and Learning 828 Fort Street Mall, Suite 500 Honolulu, HI 96813-4321 (808) 533-6000 / Fax: (808) 533-7599 WWW: http://prel.hawaii.edu/math-science/

Western Pacific Service Center Bank of Hawaii Building, Suite 203 Marina Heights Business Park PPP 145, Box 10000 Puerto Rico, Saipan, MP 96950

Pam Legdesog, Program Specialist

Yap Service Center PO Box 985 Colonia, Yap, FM 96943

### American Samoa

#### ▶ Department of Agriculture (USDA)

#### 4-H State Leader

The State 4-H Youth Development Programs are administered by the Cooperative Extension Service at land-grant universities. State 4-H leaders coordinate outreach services and training to all county offices.

Ropeti Areta, Acting State 4-H Leader American Samoa Land Grant PO Box 2609 Mapusaga, AS 96799 (684) 699-2019 / Fax: (684) 699-4595

#### ▶ Department of Commerce (DOC)

### Fagatele Bay National Marine Sanctuary

The sanctuary offers in-school presentations and sponsors the Marine Science Summer Camp, a research-oriented two-week classroom, laboratory, and field-experience program.

Punipuao Lagai, Education Coordinator Fagatele Bay National Marine Sanctuary PO Box 4318 Pago Pago, AS 96799 011 (684) 633-7354 Fax: 011 (684) 633-7355

#### National Sea Grant College Program, Operation Pathfinder

The program consists of two-week summer courses that present an introduction to oceanographic and coastal processes. Courses are available in six regions and are designed to enhance skills in science teaching.

Liz Kumabe Hawaii Sea Grant University of Hawaii 1000 Pope Road, MSB 225 Honolulu, HI 96822 (808) 956-2860 / Fax: (808) 956-9106

#### ▶ Department of Education (ED)

### Pacific Mathematics and Science Regional Consortium

The Eisenhower Regional Consortium provides information and technical assistance to help States and school districts improve mathematics and science education.

Paul Dumas, Program Director
Pacific Mathematics and Science Regional
Consortium
Pacific Resources for Education and Learning
828 Fort Street Mall, Suite 500
Honolulu, HI 96813-4321
(808) 533-6000 / Fax: (808) 533-7599
E-mail: dumasp@prel.hawaii.edu
WWW: http://prel.hawaii.edu/math-science/

### Pacific Region Educational Laboratory (PREL)

PREL identifies effective teaching techniques and school improvement efforts within the region and shares this information with State and local educators.

John W. Kofel, Executive Director Pacific Region Educational Laboratory 828 Fort Street Mall, Suite 500 Honolulu, HI 96813 (808) 533-6000 / Fax: (808) 533-7599 WWW: http://prel-oahu-1.prel.hawaii.edu/

## Pacific and Southwest Regional Technology in Education Consortium (PSR\*TEC)

ED established the Regional Technology in Education Consortia (R\*TEC) program in the fall of 1995 to help States, districts, schools, adult literacy centers, and other educational institutions use advanced technology to support improved teaching and student achievement. R\*TEC's role in educational technology is unique in two ways: the emphasis is regional and the primary goal is to ensure that technology is used effectively to support school reform. Program strategies include professional development, technical assistance, and information dissemination.

Kevin Rocap, Director
PSR\*TEC
Center for Language Minority Education & Research
c/o College of Education
California State University, Long Beach
1250 Bellflower Boulevard
Long Beach, CA 90840-2201
(310) 985-1570 / Fax: (310) 985-4528
E-mail: krocap@csulb.edu
WWW: http://www.csulb.edu/~clmer/
pswrtc/pswrtc.html



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Neal Kaske, R\*TEC Project Officer U.S. Department of Education Office of Educational Research and Improvement Office of Library Programs, Room 300h 555 New Jersey Avenue NW Washington, DC 20208-5571 (202) 219-1871 E-mail: nkaske@inet.ed.gov

## ► Department of Labor (DOL)

### Job Training Partnership Act (JTPA) Liaison

The JTPA Liaison can provide information about the Job Training Partnership Act State and local programs for economically disadvantaged adults and youth.

Uinifareti Mamea, Director Department of Human Resources American Samoa Government Pago Pago, AS 96799 (684) 633-4485 / Fax: (684) 633-1139

## ► Environmental Protection Agency (EPA)

#### **EPA** Regional Office

This office takes part in a variety of environmental education programs for both teachers and students. Programs range from teacher workshops and student contests to in-school presentations. Information on environmental issues is also available through the Public Information Center located at the office.

Stacey Benfer, Environmental Education Coordinator Environmental Protection Agency 75 Hawthorne Street (E-2) San Francisco, CA 94105 (415) 744-1586 / Fax: (415) 744-1605

### The President's Environmental Youth Awards (PEYA) Program

Young people from each State are invited to participate in PEYA, a nationwide program designed to encourage individuals, school classes, summer camps, public interest groups, and youth organizations to promote environmental awareness and community involvement. The two components of the program are the regional certificate program and the National awards competition. Regional certificates, signed by the President, are awarded to each participant by EPA regional offices. National individual project winners, or one representative from a National award-

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EPA Region 9 75 Hawthorne Street (E-2) San Francisco, CA 94105 (415) 744-1582 / Fax: (415) 744-1605

# Commonwealth of the Northern Mariana Islands

#### ▶ Department of Agriculture (USDA)

#### 4-H State Leader

The State 4-H Youth Development Programs are administered by the Cooperative Extension Service at land-grant universities. State 4-H leaders coordinate outreach services and training to all county offices.

Antonio Santos, Acting Director, 4-H Northern Marianas College PO Box 1250 Saipan, MP 96950 (670) 234-9022

## ► Department of Commerce (DOC)

#### National Sea Grant College Program, Operation Pathfinder

The Operation Pathfinder Program consists of two-week summer courses that present an introduction to oceanographic and coastal processes. Courses are available in six regions and are designed to enhance skills in science teaching.

Liz Kumabe Hawaii Sea Grant University of Hawaii 1000 Pope Road, MSB 225 Honolulu, HI 96822 (808) 956-2860 / Fax: (808) 956-9106

## ► Department of Education (ED)

### Pacific Mathematics and Science Regional Consortium

The Eisenhower Regional Consortium provides information and technical assistance to help States and school districts improve mathematics and science education.

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(808) 533-6000 / Fax: (808) 533-7599
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John W. Kofel, Executive Director Pacific Region Educational Laboratory 828 Fort Street Mall, Suite 500 Honolulu, HI 96813 (808) 533-6000 / Fax: (808) 533-7599 WWW: http://prel-oahu-1.prel.hawaii.edu/

## Pacific and Southwest Technology in Education Consortium (PSR\*TEC)

ED established the Regional Technology in Education Consortia (R\*TEC) program in the fall of 1995 to help States, districts, schools, adult literacy centers, and other educational institutions use advanced technology to support improved teaching and student achievement. R\*TEC's role in educational technology is unique in two ways: the emphasis is regional and the primary goal is to ensure that technology is used effectively to support school reform. Program strategies include professional development, technical assistance, and information dissemination.

Kevin Rocap, Director
PSR\*TEC
Center for Language Minority Education &
Research
c/o College of Education
California State University, Long Beach
1250 Bellflower Boulevard
Long Beach, CA 90840-2201
(310) 985-1570 / Fax: (310) 985-4528
E-mail: krocap@csulb.edu
WWW: http://www.csulb.edu/~clmer/
pswrtc/pswrtc.html



Neal Kaske, R\*TEC Project Officer U.S. Department of Education Office of Educational Research and Improvement Office of Library Programs, Room 300h 555 New Jersey Avenue NW Washington, DC 20208-5571 (202) 219-1871 E-mail: nkaske@inet.ed.gov

### ► Department of Labor (DOL)

### Job Training Partnership Act (JTPA) Liaison

The JTPA Liaison can provide information about the Job Training Partnership Act State and local programs for economically disadvantaged adults and youth.

Florida De La Cruz, Executive Director Marianas JTPA Program Office of the Governor Commonwealth of the Northern Mariana Islands Saipan, MP 96950 (670) 664-7000/7001 / Fax: (670) 322-5096

# Federated States of Micronesia

Chuuk Kosrae Pohnpei Yap

### ▶Department of Agriculture (USDA)

#### 4-H State Leader

The State 4-H Youth Development Programs are administered by the Cooperative Extension Service at land-grant universities. State 4-H leaders coordinate outreach services and training to all county offices.

Anita R. Suta, Director Cooperative Extension Service College of Micronesia PO Box 1179 Kolonia, Pohnpei, FM 96941 (691) 320-2728 or 2590 / Fax: (691) 320-2726

### Ag in the Classroom State Leader

This program promotes increased understanding of agriculture and possible careers in the agricultural sciences. With National leadership provided by USDA, each State manages its own programs, with assistance from agribusiness, educational institutions, and government.

Dr. Ruben Dayrit CTAS/College of Micronesia Kolonia, Pohnpei, FMS 96941 (691) 320-2738 / Fax: (691) 320-2726

### ► Department of Commerce (DOC)

### National Sea Grant College Program, Operation Pathfinder

The program consists of two-week summer courses that present an introduction to oceanographic and coastal processes. Courses are available in six regions and are designed to enhance skills in science teaching.

Liz Kumabe Hawaii Sea Grant University of Hawaii 1000 Pope Road, MSB 225 Honolulu, HI 96822 (808) 956-2860 / Fax: (808) 956-9106

### ► Department of Education (ED)

### Pacific Mathematics and Science Regional Consortium

The Eisenhower Regional Consortium provides information and technical assistance to help States and school districts improve mathematics and science education.

Paul Dumas, Program Director
Pacific Mathematics and Science Regional
Consortium
Pacific Resources for Education and Learning
828 Fort Street Mall, Suite 500
Honolulu, HI 96813-4321
(808) 533-6000 / Fax: (808) 533-7599
E-mail: dumasp@prel.hawaii.edu
WWW: http://prel.hawaii.edu/math-science/

### Pacific Region Educational Laboratory (PREL)

PREL identifies effective teaching techniques and school improvement efforts within the region and shares this information with State and local educators.

John W. Kofel, Executive Director Pacific Region Educational Laboratory 828 Fort Street Mall, Suite 500 Honolulu, HI 96813 (808) 533-6000 / Fax: (808) 533-7599 WWW: http://prel-oahu-1.prel.hawaii.edu/

# Pacific and Southwest Technology in Education Consortium (PSR\*TEC)

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(310) 985-1570 / Fax: (310) 985-4528
E-mail: krocap@csulb.edu
WWW: http://www.csulb.edu/~clmer/
pswrtc/pswrtc.html

Neal Kaske, R\*TEC Project Officer
U.S. Department of Education
Office of Educational Research and
Improvement
Office of Library Programs, Room 300h
555 New Jersey Avenue NW
Washington, DC 20208-5571
(202) 219-1871
E-mail: nkaske@inet.ed.gov

### ► Department of Labor (DOL)

### Job Training Partnership Act (JTPA) Liaison

The JTPA Liaison can provide information about the Job Training Partnership Act State and local programs for economically disadvantaged adults and youth.

Kohne K. Ramon, Acting Director Office of Administrative Service Government of the Federated States of Micronesia PO Box 490 Kolonia, Pohnpei, FM 96941 (691) 320-2618 / Fax: (691) 320-5854



### Guam

### **▶ Department of Agriculture** (USDA)

#### 4-H State Leader

The State 4-H Youth Development Programs are administered by the Cooperative Extension Service at land-grant universities. State 4-H leaders coordinate outreach services and training to all county offices.

Theodore M. Iyechade, 4-H Program Leader College of Agriculture and Life Sciences CES, 4-H, and Youth University of Guam Mangilao, GU 96923 (671) 734-4753 / Fax: (671) 734-6842

### Ag in the Classroom State Leader

This program promotes increased understanding of agriculture and possible careers in the agricultural sciences. With National leadership provided by USDA, each State manages its own programs, with assistance from agribusiness, educational institutions, and government.

Victor Artero College of Agriculture and Life Sciences University of Guam Mangilao, GU 96923 (671) 735-2009 / Fax: (671) 734-6842

### **▶**Department of Commerce (DOC)

### **National Sea Grant College** Program, Operation Pathfinder

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Liz Kumabe Hawaii Sea Grant University of Hawaii 1000 Pope Road, MSB 225 Honolulu, HI 96822 (808) 956-2860 / Fax: (808) 956-9106

### **▶** Department of Defense (DoD)

#### U.S. Naval Forces Marianas, Guam

The base participates in the Navy Community Service Program through formation of partnerships with schools and other youth organizations in the area.

COMNAVMARIANAS GO Commander U.S. Naval Forces Marianas PSC 489, Box 28 FPO AP 96536-0051 (671) 349-5212

### **▶** Department of Education (ED)

### **Pacific Mathematics and Science** Regional Consortium

The Eisenhower Regional Consortium provides information and technical assistance to help States and school districts improve mathematics and science education.

Paul Dumas, Program Director Pacific Mathematics and Science Regional Pacific Resources for Education and Learning 828 Fort Street Mall, Suite 500 Honolulu, HI 96813-4321 (808) 533-6000 / Fax: (808) 533-7599 E-mail: dumasp@prel.hawaii.edu WWW: http://prel.hawaii.edu/math-science/

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Kevin Rocap, Director PSR\*TEC Center for Language Minority Education & Research c/o College of Education California State University, Long Beach 1250 Bellflower Boulevard Long Beach, CA 90840-2201 (310) 985-1570 / Fax: (310) 985-4528 E-mail: krocap@csulb.edu WWW: http://www.csulb.edu/~clmer/ pswrtc/pswrtc.html

Neal Kaske, R\*TEC Project Officer U.S. Department of Education Office of Educational Research and Improvement Office of Library Programs, Room 300h 555 New Jersey Avenue NW Washington, DC 20208-5571 (202) 219-1871 E-mail: nkaske@inet.ed.gov

### ▶ Department of Labor (DOL)

### Job Training Partnership Act (JTPA) Liaison

The JTPA Liaison can provide information about the Job Training Partnership Act State and local programs for economically disadvantaged adults and youth.

Peter S. Calvo, Director Agency for Human Resources Development PO Box CP Agana, GU 96910 (671) 646-9341 / Fax: (671) 646-9339

### **▶** Environmental Protection Agency (EPA)

#### **EPA** Regional Office

This office takes part in a variety of environmental education programs for both teachers and students. Programs range from teacher workshops and student contests to in-school presentations. Information on environmental issues is also available through the Public Information Center located at the office.



Stacey Benfer, Environmental Education Coordinator Environmental Protection Agency 75 Hawthorne Street (E-2) San Francisco, CA 94105 (415) 744-1586 / Fax: (415) 744-1605

### The President's Environmental Youth Awards (PEYA) Program

Young people from each State are invited to participate in PEYA, a nationwide program designed to encourage individuals, school classes, summer camps, public interest groups, and youth organizations to promote environmental awareness and community involvement. The two components of the program are the regional certificate program and the National awards competition. Regional certificates, signed by the President, are awarded to each participant by EPA regional offices. National individual project winners. or one representative from a National awardwinning group project, along with one sponsor, are honored at EPA headquarters in Washington, DC. Interested K-12 individuals or groups may obtain application materials and contest rules by contacting the EPA Regional Office that serves their State. PEYA has been an ongoing project since it was created by the White House Office of Education and the EPA in 1971.

EPA Region 9 75 Hawthorne Street (E-2) San Francisco, CA 94105 (415) 744-1582 / Fax: (415) 744-1605

### Hawaii

### ▶ Department of Agriculture (USDA)

#### 4-H State Leader

The State 4-H Youth Development Programs are administered by the Cooperative Extension Service at land-grant universities. State 4-H leaders coordinate outreach services and training to all county offices.

Rose Saito, Acting Program Leader 4-H Youth Development University of Hawaii at Manoa 3050 Maile Way Honolulu, HI 96822 (808) 956-8327 / Fax: (808) 988-9681 E-mail: ta\_4h@avax.ctahr.hawaii.edu

### Ag in the Classroom State Leader

This program promotes increased understanding of agriculture and possible careers in the agricultural sciences. With National leadership provided by USDA, each State manages its own programs, with assistance from agribusiness, educational institutions, and government.

Michael Barros Department of Education 2530 10th Avenue Building A, Room 23 Honolulu, HI 96816 (808) 733-9125

### ► Department of Commerce (DOC)

### Hawaiian Islands Humpback Whale National Marine Sanctuary

The sanctuary was congressionally designated in November 1992. Currently under development is a Sanctuary Management Plan that includes an education and interpretation section. Educational activities highlight the humpback whale and Hawaii's unique marine environment.

Allen Tom, Manager Hawaiian Islands Humpback Whale National Marine Sanctuary 726 South Kihei Road Kihei, HI 96753 (808) 879-2818 (800) 831-4888 (Neighbor Islands) Fax: (808) 874-3815

### National Sea Grant College Program, Operation Pathfinder

The Operation Pathfinder Program consists of two-week summer courses that present an introduction to oceanographic and coastal processes. Courses are available in six Regions and are designed to enhance skills in science teaching.

Liz Kumabe Hawaii Sea Grant University of Hawaii 1000 Pope Road, MSB 225 Honolulu, HI 96822 (808) 956-2860 / Fax: (808) 956-9106

## ► Department of Defense (DoD)

#### Naval Base, Pearl Harbor

The base participates in the Navy Community Service Program through formation of partnerships with schools and other youth organizations in the area.

COMNAVBASE, Pearl Harbor HI Commander Naval Base Pearl Harbor, HI 96860-5350 (808) 474-4750

### ▶ Department of Education (ED)

#### **Eisenhower State Coordinators**

Eisenhower State Coordinators administer the Eisenhower Professional Development Program State Formula grants. The program focuses on sustained and intensive high-quality professional development through inservice programs.

Justin Mew Eisenhower Professional Development Program 189 Lunalilo Home Road, Second Floor PO Box 2360 Honolulu, HI 96825 (808) 396-2567 / Fax: (808) 548-5390

Kathleen Nishimura Eisenhower Professional Development Program 189 Lunalilo Home Road, Second Floor PO Box 2360 Honolulu, HI 96825 (808) 396-2567 / Fax: (808) 548-5390

### **Eisenhower State Coordinators** for Higher Education

Eisenhower State Coordinators oversee the Eisenhower Professional Development State Formula Grants for the State Agency for Higher Education (SAHE). The program focuses on teacher enhancement through both inservice and preservice programs.

Thomas W. Sileo
Eisenhower Professional Development
Program
University of Hawaii, College of Education
1776 University Avenue
Honolulu, HI 96825
(808) 956-7704 / Fax: (808) 956-3106

### Pacific Mathematics and Science Regional Consortium

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Paul Dumas, Program Director Pacific Mathematics and Science Regional Consortium

Pacific Resources for Education and Learning 828 Fort Street Mall, Suite 500 Honolulu, HI 96813-4321 (808) 533-6000 / Fax: (808) 533-7599 E-mail: dumasp@prel.hawaii.edu WWW: http://prel.hawaii.edu/math-science/

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### ▶ Department of Energy (DOE)

#### Regional Science Bowl

DOE sponsors a Regional Science Bowl for Hawaii high schools. Held each February, this is a public/private-sponsored academic competition that encourages the study of science and mathematics and the pursuit of related careers. The regional winner advances to the National competition held each spring.

Eileen Yoshinaka PO Box 50168 Honolulu, HI 96850 (808) 541-2564 / Fax: (808) 541-2562

### ► Department of the Interior (DOI)

#### Haleakala National Park

Guided, environmental field trips for school groups are the primary activities offered at the park. Teacher guides and pre-visit materials are provided for field trip participants.

Other programs include the following:

- ► If Rocks Could Talk lets students conduct experiments and map landforms while hiking. The goal is to learn how Hawaii was created by volcanoes and destroyed by erosion. Pre- and post-visit classroom activities are available.
- Kilohoku O Haleakala is an hour-long bimonthly program on celestial bodies and events, the role of astronomy in Hawaiian culture, and related mythology.
- ► Sliding Sands Wilderness Hike is a twomile, two-hour walk into the cinder desert to examine aeolian desert, geology, early Hawaiian usage and mythology, and endangered species.
- ▶ Waikamoi Cloud Forest Hike is a threehour, three-mile hike through privately owned reforested grazing land into intact old growth forest to examine impacts on the native biota and the role of the forest in Hawaiian culture.
- Who Lives at Haleakala? examines species of plants and animals found on Haleakala that are unique and found nowhere else on Earth due to adaptation and isolation of habitat. Pre- and postvisit classroom activities are available.

Bob Butterfield, Chief Division of Interpretation Haleakala National Park PO Box 369 Makawao, HI 96768 (808) 572-9306 / Fax: (808) 572-1304

#### Hawaii Volcanoes National Park

The park offers nature and orientation walks to inform students about the geological mechanics of volcanoes. In addition, a comprehensive onsite program educates State and visiting mainland students about the adaptation of Hawaiian flora, fauna, and people to their environment and about volcanic phenomena. The teacher's guide to the geology of the park provides lesson plans and audiovisual materials.

Richard Rasp, Chief Park Interpreter Hawaii Volcanoes National Park PO Box 52 Hawaii National Park, HI 96718 (808) 967-7184 / Fax: (808) 967-8068 or 8186

#### Kaloko-Honokohau National Historical Park

Staff offer guided walks and activities to educate students about the geology, anthropology, biology, and history within the park.

Division of Interpretation Kaloko-Honokohau National Historical Park 73-4786 Kanalani Street, #14 Kailua-Kona, HI 96740 (808) 329-6881

### Kauai National Wildlife Refuge

Guided tours and teacher guides that focus on environmental education are available upon request. Students accompanied by their teachers, parents, or group leaders are provided with education and interpretation of Hawaiian wildlife from volunteers and staff. A manual has also been developed for K–6 classroom teachers with curriculum activities for use in the classroom and onsite locations. This program serves 4,000 to 5,000 students annually.

Workshops are held at the complex to train educators how to use the environmental education manual developed for use on the Refuge.

Richard Voss, Project Leader Kauai NWR Complex PO Box 87 Hanamaulu, HI 96715 (808) 828-1413 / Fax: (808) 828-1413

#### Pu'uhonua O Honauuau National Historic Park

The program Living in Harmony with the Land and the Sea invites participants to identify the relationship of animals and plants



with Hawaii's conservation laws and practices. The goal is to expand environmental awareness.

Gordon B. Jovce, Chief Pu'uhonua O Honauuau N.H.P. Interpretation and Resources Management PO Box 129 Honauuau, HI 96726

(808) 328-2326 or 2288 Fax: (808) 328-9485

### Kalaupapa National Historical

The Mololzai Educational Service Project consists of presentations to fourth through sixth graders on Hawaiian natural and cultural history topics such as geology, native plants and animals, and Polynesian settlement and culture. Classroom presentations are followed by field trips.

Penny Martin, Education Specialist Kalaupapa NHP, HI 96742 (808) 553-5136 or 567-6802 Fax: (808) 567-6729

#### **Project WILD**

Project WILD offers teacher training and educational materials. Teacher guides, free to teachers who attend the training session, contain more than 80 supplementary, interdisciplinary activities for grades K-12.

Colleen Murakami, Project WILD Coordinator Department of Education 189 Lunalilo Home Road Honolulu, HI 96825 (808) 396-2572 / Fax: (808) 548-5390

Randy Honebrink, Project WILD Coordinator Hawaii Division of Aquatic Resources 1151 Punchbowl Street Honolulu, HI 96813 (808) 587-0111 / Fax: (808) 587-0115

### ▶ Department of Labor (DOL)

### Job Training Partnership Act (JTPA) Liaison

The JTPA Liaison can provide information about the Job Training Partnership Act State and local programs for economically disadvantaged adults and youth.

Dayton Nakanelua, Director Hawaii Department of Labor and Industrial Relations 830 Punchbowl Street, Room 320 Honolulu, HI 96813 (808) 586-8844 / Fax: (808) 586-9099

### **▶**Department of **Transportation (DOT)**

### **Federal Aviation Administration** (FAA) Aviation Education

The FAA Aviation Education Representative coordinates aviation education services, including materials and programs for the FAA in the States assigned to the region.

Programs include the following:

- The Aviation Career Education (ACE) Academy is a one-week summer aviation education program for high school students sponsored by the FAA along with a host educational institution. The program provides students with diverse experiences in aviation career exploration. The focus is on aviation career clusters identified by FAA, with an emphasis on opportunities for women and minorities. A goal is to have one program in each State and U.S. Territory. The FAA will conduct regional leadership workshops and provide funds based on the availability of resources.
- Aviation Education Workshops for Teachers provide teachers with information on FAA aviation programs and materials and prepare them to teach aviation in the classroom. Annual workshops are conducted at colleges and universities across the Nation. The FAA provides information, materials, and speakers for the program.
- National Congress on Aviation and Space **Education** is sponsored annually by the FAA in partnership with the National Aeronautics and Space Administration and the Civil Air Patrol. The meeting includes teacher workshops and crosstalk sessions to exchange ideas on promoting aerospace education.

Sandi Couverley, AWP-17F, FAA Aviation Education Representative PO Box 92007 Worldway Postal Center Los Angeles, CA 90009 (310) 297-0556 / Fax: (310) 297-0706

#### **FAA Aviation Education Resource** Centers

Located at colleges, museums, and State aviation authority offices, these centers function as information distribution centers for Federal Aviation Administration education materials and resources. The Resource Centers maintain and provide quantities of printed materials, videotapes, and computer educational software. Center personnel can also provide general information, conduct workshops, and make aviation-related presentations.

Veronica Balsa, Director Aviation Education Resource Center Mid-Pacific Institute Aviation/Space Science 2445 Kaala Street Honolulu, HI 96822 (808) 973-5000

Rodney M. Kuba Airports Division Aviation Education Resource Center State of Hawaii Department of Transportation Honolulu International Airport Gate 29, EWA Service Court Road Honolulu, HI 96819-1898 (808) 836-6542

### **▶** Environmental Protection Agency (EPA)

#### **EPA** Regional Office

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Stacey Benfer, Environmental Education Coordinator **Environmental Protection Agency** 75 Hawthorne Street (E-2) San Francisco, CA 94105 (415) 744-1586 / Fax: (415) 744-1605

#### The President's Environmental Youth Awards (PEYA) Program

Young people from each State are invited to participate in PEYA, a nationwide program designed to encourage individuals, school classes, summer camps, public interest groups, and youth organizations to promote environmental awareness and community involvement. The two components of the program are the regional certificate program and the National awards competition. Regional certificates, signed by the President, are awarded to each participant by EPA regional offices. National individual project winners, or one representative from a National awardwinning group project, along with one sponsor, are honored at EPA headquarters in Washington, DC. Interested K-12 individuals or groups may obtain application materials and contest rules by contacting the EPA Regional Office that serves their State. PEYA has been an ongoing project since it was created by the White House Office of Education and the EPA in 1971.



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### ▶ National Aeronautics and **Space Administration** (NASA)

#### **NASA Educator Resource Center**

The center has NASA-related educational materials in various formats, including laserdiscs, CD-ROMs, videotapes, slides, audiotapes, publications, and teacher guides. Educators may preview or copy NASA materials upon request.

NASA Ames Research Center Educator Resource Laboratory Educator Resource Center Mail Stop T12-A Moffett Field, CA 94035-1000 (415) 604-3574

#### **NASA Field Centers**

Each field center has an educational programs officer who is responsible for precollege education programs. In addition to administering National programs, the center offers programs and services to meet regional and local needs.

Garth A. Hull, Chief Educational Programs Branch NASA Ames Research Center Mail Stop 204-12 Moffett Field, CA 94035 (415) 604-5543

#### **NASA** Regional Educator **Resource Center (RERC)**

To offer more educators the opportunity to visit the Educator Resource Center Network (ERCN), NASA forms partnerships with planetariums, universities, museums, and other nonprofit organizations to serve as RERCs. Teachers may preview or copy NASA materials upon request.

Barbers Point Elementary School NASA Regional Educator Resource Center Boxer Road Barbers Point Naval Air Station Ewa Beach, HI 96706 (808) 673-7410

#### **Space Grant Consortium**

The Space Grant Consortium in each State consists of colleges, universities, industry, and other organizations that have an interest in aeronautics and space education. Each consortium receives NASA funds for use in

implementing a balanced program of research, education, and public service.

Hawaii Space Grant Consortium Department of Planetary Geosciences 2525 Correa Road University of Hawaii at Manoa Honolulu, HI 96822 (808) 956-3147

### Republic of the **Marshall Islands**

### **▶** Department of Commerce (DOC)

### National Sea Grant College Program, Operation Pathfinder

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Liz Kumabe Hawaii Sea Grant University of Hawaii 1000 Pope Road, MSB 225 Honolulu, HI 96822 (808) 956-2860 / Fax: (808) 956-9106

### ▶ Department of Education (ED)

### **Pacific Mathematics and Science** Regional Consortium

The Eisenhower Regional Consortium provides information and technical assistance to help States and school districts improve mathematics and science education.

Paul Dumas, Program Director Pacific Mathematics and Science Regional Consortium Pacific Resources for Education and Learning 828 Fort Street Mall, Suite 500 Honolulu, HI 96813-4321 (808) 533-6000 / Fax: (808) 533-7599 E-mail: dumasp@prel.hawaii.edu

WWW: http://prel.hawaii.edu/math-science/

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Kevin Rocap, Director PSR\*TEC Center for Language Minority Education & Research c/o College of Education California State University, Long Beach 1250 Bellflower Boulevard Long Beach, CA 90840-2201 (310) 985-1570 / Fax: (310) 985-4528 E-mail: krocap@csulb.edu WWW: http://www.csulb.edu/~clmer/ pswrtc/pswrtc.html

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### **▶** Department of Labor (DOL)

### Job Training Partnership Act (JTPA) Liaison

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Antonio Elio, Minister of Social Services PO Box 1138 Majuro, Republic of the Marshall Islands 96960 (692) 625-3345

# Republic of Palau

### **▶** Department of Commerce (DOC)

### National Sea Grant College Program, Operation Pathfinder

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Liz Kumabe Hawaii Sea Grant University of Hawaii 1000 Pope Road, MSB 225 Honolulu, HI 96822 (808) 956-2860 / Fax: (808) 956-9106

### ► Department of Education (ED)

### Pacific Mathematics and Science Regional Consortium

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828 Fort Street Mall, Suite 500

(808) 533-6000 / Fax: (808) 533-7599 E-mail: dumasp@prel.hawaii.edu

WWW: http://prel.hawaii.edu/math-science/

### Pacific Region Educational Laboratory (PREL)

Honolulu, HI 96813-4321

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c/o College of Education
California State University, Long Beach
1250 Bellflower Boulevard
Long Beach, CA 90840-2201
(310) 985-1570 / Fax: (310) 985-4528
E-mail: krocap@csulb.edu
WWW: http://www.csulb.edu/~clmer/
pswrtc/pswrtc.html

Neal Kaske, R\*TEC Project Officer U.S. Department of Education Office of Educational Research and Improvement Office of Library Programs, Room 300h 555 New Jersey Avenue NW Washington, DC 20208-5571 (202) 219-1871 E-mail: nkaske@inet.ed.gov

### ► Department of Labor (DOL)

### Job Training Partnership Act (JTPA) Liaison

The JTPA Liaison can provide information about the Job Training Partnership Act State and local programs for economically disadvantaged adults and youth.

Keral Mariur, Executive Director Private Industry Council/SJTCC PO Box 1138 Koror, Republic of Palau 96940 (680) 488-2513 / Fax: (680) 488-1725

### ► Environmental Protection Agency (EPA)

#### **EPA Regional Office**

This office takes part in a variety of environmental education programs for both teachers and students. Programs range from teacher workshops and student contests to in-school presentations. Information on environmental issues is also available through the Public Information Center located at the office.

Stacey Benfer, Environmental Education Coordinator Environmental Protection Agency 75 Hawthorne Street (E-2) San Francisco, CA 94105 (415) 744-1586 / Fax: (415) 744-1605

### The President's Environmental Youth Awards (PEYA) Program

Young people from each State are invited to participate in PEYA, a nationwide program designed to encourage individuals, school classes, summer camps, public interest groups, and youth organizations to promote environmental awareness and community involvement. The two components of the program are the regional certificate program and the National awards competition. Regional certificates, signed by the President, are awarded to each participant by EPA regional offices. National individual project winners, or one representative from a National awardwinning group project, along with one sponsor, are honored at EPA headquarters in Washington, DC. Interested K-12 individuals or groups may obtain application materials and contest rules by contacting the EPA Regional Office that serves their State. PEYA has been an ongoing project since it was created by the White House Office of Education and the EPA in 1971.

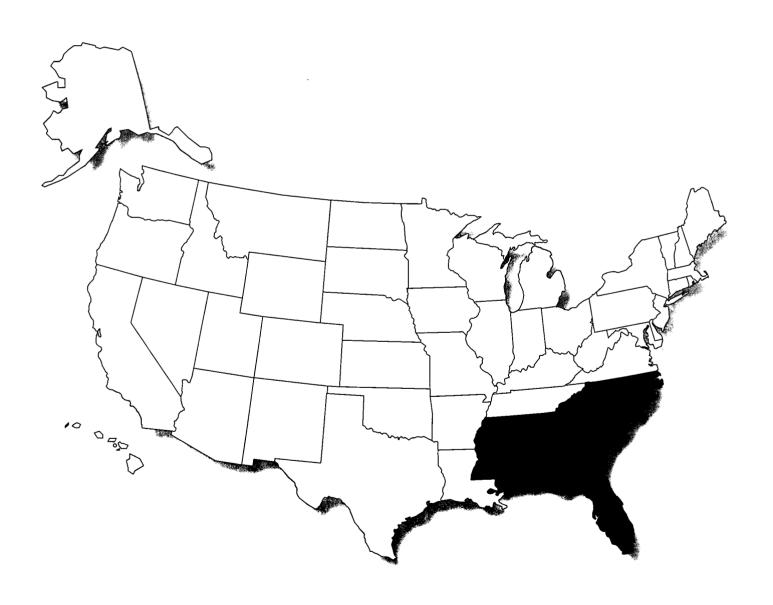
EPA Region 9 75 Hawthorne Street (E-2) San Francisco, CA 94105 (415) 744-1582 / Fax: (415) 744-1605



- ► Alabama
- ▶ Florida
- ▶ Georgia
- **►** Mississippi
- ▶ North Carolina
- ▶ South Carolina



Eisenhower Consortium for Mathematics and Science Education at SERVE





# Eisenhower Consortium for Mathematics and Science Education at SERVE



The Eisenhower Consortium for Mathematics and Science Education at SERVE (SouthEast Regional Vision for Education) is one of 10 Eisenhower Mathematics and Science Regional Consortia established by the U.S. Department of Education. The National Network of Eisenhower Regional Consortia and the Eisenhower National Clearinghouse for Mathematics and Science Education (ENC) form a coordinated, field-based National infrastructure to promote systemic educational reform. The Consortium, a coalition of educators, business leaders, governors, and policymakers, promotes systemic reform in mathematics and science education in its region. In collaboration with other stakeholders in the region, the Consortium works to expand and enhance mathematics and science education by providing technical assistance, linking and coordinating resources, using technology, and disseminating information about successful practices.

The Consortium's goal is to empower educators in the Southeast to provide quality mathematics and science programs for all students. In keeping with the Consortium's philosophy of decentralizing technical assistance through the use of field offices, three of the Consortium's Program Specialists are housed in offices outside of Florida (Greensboro, NC; Atlanta, GA; and Cleveland, MS).

Collaboration and coordination are the foundation for the Consortium's work, and since its inception, the Consortium has been involved in Laboratory and Consortium Network Programs. The Consortium provided leadership in the identification of exemplary mathematics and science programs for the National Network's Successful Practices effort. Also, the Consortium led the task force that compiled and published an Equity Resource Guide for Mathematics and Science Education. At the regional level, the Consortium continues to seize upon opportunities to work with a variety of stakeholders to carry out its mission. For example, mathematics and science specialists, State- and district-level administrators, and Eisenhower State Grant program coordinators were involved in the identification of exemplary programs and practices.

#### **Consortium Programs**

To more effectively disseminate information concerning exemplary programs and deliver focused technical assistance, the Consortium has developed an annual institute and a technical assistance academy.

- ▶ The Promising Practices Leadership
  Institute, an annual event held each
  September, showcases the talents and
  enhances the leadership skills of past
  Promising Practices award winners,
  National Science Foundation (NSF) projects, and other exemplary programs from
  across the region and Nation. District or
  school-level teams are invited from each
  of the six SERVE States to participate in
  sessions that highlight these programs.
  The sessions are intended to equip teachers with skills and knowledge needed to
  develop strategies to implement new programs in their schools.
- The Technical Assistance Academy for Mathematics and Science Services (TAAMSS) is the cornerstone of the Consortium's delivery of region-wide technical assistance. The Academy's goal is to provide high quality professional development to a cadre of staff developers and lead teachers from each State. These participants then function as regional resources and assist other teachers and educators to develop strategies for improving the teaching of mathematics, science, and technology. Academy participants are affiliated with a variety of education agencies including universities, State and Urban Systemic Initiatives, Regional Service Centers, and local districts, especially those recognized as being in "critical" need. The Academy provides training for an array of topics, including technology, facilitative leadership for change, alternative assessment, curriculum frameworks, implementing National standards, and grant writing.

The Consortium also focuses on enhancing the work of others by linking and coordinating resources. In this role, the Consortium contributes support to established programs and agencies.

Examples of this kind of activity include the following:

- The South Eastern Consortium for Minorities in Engineering (SECME) Summer Institute provides an opportunity for teachers to learn new methods to enrich their instructional programs. For example, the teachers spend a significant portion of their time doing hands-on projects in engineering laboratories and in industrial/manufacturing settings. Also, the teachers are provided sessions that focus on the required academic preparation for students pursuing engineering and information regarding the current opportunities in the engineering profession. SECME combines many of the components needed to bring about equity in mathematics and science education.
- ▶ The Technology Institute at Fayetteville State University is a week-long summer institute for teachers and professors linked to the Historically Black Colleges and Universities (HBCU) network.

  Participants from across the southeast and Nation are introduced to interactive and calculator-based methods for engaging students in upper-level mathematics courses such as Trigonometry and Calculus. Using the Internet as a resource is also stressed.

#### **Publications**

The Eisenhower Consortium at SERVE distributes SERVE catalogs and publications as well as publications form the U.S. Department of Education, the Eisenhower National Clearinghouse for Mathematics and Science Education (ENC), and the NSF. The Consortium also distributes its own publications. Action Research: Perspectives From Teachers' Classrooms and Science in the Elementary School Classroom: Portraits of Action Research are monographs consisting of studies conducted and reported by middle school science teachers for Florida State University's Science FEAT (Science For Early Adolescence Teachers) program. Policy Brief: The Need for Improved Mathematics and Science Education depicts the status of mathematics and science education in the region and the need for improvement. A newsletter,



Common Denominator, is published twice a year with a special focus for each issue; past topics have included systemic reform, equity, and informal science.

Dr. Francena D. Cummings, Director

Karen Charles,

Program Specialist (NC/SC)

Cheryl Cliett,

Program Specialist (FL)

John Roberts,

Program Specialist (AL/MS)

Lori Donoho,

Program Specialist (GA)

Michael Vigliano,

Research Associate

Jane Griffin,

Evaluation Specialist

Cindy Byrd,

Instructional Technology Specialist

Eisenhower Consortium for Mathematics and Science Education at SERVE 345 South Magnolia Drive, Suite E-22 Tallahassee, FL 32301 (850) 671-6033

(800) 871-8033 (800) 854-0476 / Fax: (850) 671-6010 WWW: http://www.serve.org/Eisenhower/

### **Alabama**

### ▶ Department of Agriculture (USDA)

#### 4-H State Leader

The State 4-H Youth Development Programs are administered by the Cooperative Extension Service at land-grant universities. State 4-H leaders coordinate outreach services and training to all county offices.

Dr. Wilma J. Ruffin, Extension Assistant Director 4-H Youth Development Programs 101 Duncan Hall Auburn, AL 36849 (334) 844-5540 / Fax: (334) 844-5544 E-mail: wruffin@acenet.auburn.edu

#### Ag in the Classroom State Leader

This program promotes increased understanding of agriculture and possible careers in

the agricultural sciences. With National leadership provided by USDA, each State manages its own programs, with assistance from agribusiness, educational institutions, and government.

Jane Alice Lee 2101 Bell Road Montgomery, AL 36117 (334) 240-7124

Brenda Summerlin Department of Agriculture and Industries PO Box 3336 Montgomery, AL 36193 (334) 240-7124

### ▶ Department of Commerce (DOC)

### National Sea Grant College Program, Operation Pathfinder

The program consists of two-week summer courses that present an introduction to oceanographic and coastal processes. Courses are available in six regions and are designed to enhance skills in science teaching.

Sharon Walker Mississippi-Alabama Sea Grant Consortium and Gulf Coast Research Laboratory PO Box 7000 Ocean Springs, MS 39566-7000 (601) 374-5550 / Fax: (601) 374-5559

### Weeks Bay National Estuarine Research Reserve

The reserve offers onsite and outreach education programs.

Margaret Helcombe, Education Coordinator Weeks Bay National Estuarine Research Reserve Marine Resources Division Department of Economic and Community Affairs 11300, U.S. Highway 98 Fairhope, AL 36532 (334) 928-9792 / Fax: (334) 928-1792

### ► Department of Defense (DoD)

### Science and Engineering Apprentice Program

This program, supported by DoD and administered by The George Washington University, is designed to provide research experience for high school students attending school near this participating research facility.

Each student works with a senior scientist or engineer who acts as a mentor for eight weeks during the summer. Redstone Arsenal sponsors two separate operations.

Katie Blanding, Ph.D. Army Test, Measurement and Diagnostic Equipment Activity (TMDE-A) Redstone Arsenal, AL 35898-5400 (205) 876-9296

#### **U.S. Army Aviation Museum**

The museum's displays depict the transformation of aviation technology from 1918 to the present. Guided tours available through advance arrangements.

U.S. Army Aviation Museum PO Box 610620 Fort Rucker, AL 36362-0610 (334) 255-3036

### ► Department of Education (ED)

### Eisenhower Consortium for Mathematics and Science Education at SERVE

The Eisenhower Regional Consortium provides information and technical assistance to help States and school districts improve mathematics and science education.

Francena Cummings, Director
Eisenhower Consortium for Mathematics and
Science Education at SERVE
345 South Magnolia Drive, Suite D-23
Tallahassee, FL 32301-2950
(800) 854-0476
(904) 671-6033 / Fax: (904) 671-6010
WWW: http://www.serve.org/Eisenhower

#### **Eisenhower State Coordinators**

Eisenhower State Coordinators administer the Eisenhower Professional Development Program State Formula grants. The program focuses on sustained and intensive high-quality professional development through inservice programs.

Tyson Thompson and Frankie Mitchum Eisenhower Professional Development Program Alabama Department of Education 5348 Gordon Persons Building 50 North Ripley Street Montgomery, AL 36130-3901 (334) 242-8199 / Fax: (334) 242-0496



### **Eisenhower State Coordinators** for Higher Education

Eisenhower State Coordinators oversee the Eisenhower Professional Development State Formula Grants for the State Agency for Higher Education (SAHE). The program focuses on teacher enhancement through both inservice and preservice programs.

Dr. Elizabeth C. French Eisenhower Professional Development Program Alabama Commission on Higher Education 3465 Norman Bridge Road Montgomery, AL 36105-2310 (334) 281-1921 / Fax: (334) 281-6711

### Southeast and Islands Regional Technology in Education Consortium (SEIR\*TEC)

ED established the Regional Technology in Education Consortia (R\*TEC) program in the fall of 1995 to help States, districts, schools, adult literacy centers, and other educational institutions use advanced technology to support improved teaching and student achievement. R\*TEC's role in educational technology is unique in two ways: the emphasis is regional and the primary goal is to ensure that technology is used effectively to support school reform. Program strategies include professional development, technical assistance, and information dissemination.

Don Holznagel, Director, SEIR\*TEC 41 Marietta Street NW, Suite 1000 Atlanta, GA 30303 (800) 659-3204 (404) 893-0100 / Fax: (404) 577-7812 E-mail: dholznag@serve.org WWW: http://www.serve.org/seir-tec/

Deborah Williams, R\*TEC Project Officer U.S. Department of Education, OERI ORAD/SLSD, Room 504f 555 New Jersey Avenue NW Washington, DC 20208-5644 (202) 219-2204 E-mail: Deborah\_Williams@ed.gov

### SouthEastern Regional Vision for **Education (SERVE)**

SERVE identifies effective teaching techniques and school improvement efforts within the region and shares this information with State and local educators.

Roy H. Forbes, Executive Director SERVE PO Box 5367 Greensboro, NC 27435 (800) 755-3277 (910) 334-3211 / Fax: (910) 334-3268 WWW: http://www.serve.org/

SERVE, Alabama 50 North Ripley Street 5114 Gordon Person Building Montgomery, AL 36130 (205) 242-9758 / Fax: (205) 242-9708

### **▶ Department of Energy** (DOE)

### **Adventures in Supercomputing** (AiS)

AiS is designed to foster and enhance the participation of diverse populations of high school students in mathematics, science, and computing.

Barbara G. Summers, Education Program Manager Oak Ridge National Laboratory Office of University and Science Education PO Box 2008, MS 6366 Oak Ridge, TN 37831-6366 (423) 241-3705 / Fax: (423) 241-6776 E-mail: summersbg@ornl.gov

### Appalachian Regional Commission (ARC) and Oak Ridge National Laboratory (ORNL)

A summer science, mathematics, and technology Teacher Leadership Institute is available for secondary teachers to participate in research-based programs at ORNL. The institute is provided in a two-week summer residential format patterned after the ORNL/National Science Foundation (NSF) National Teacher Enhancement Project and Leadership Institute. Participants are selected by the ARC from secondary schools throughout the ARC region. The focus is on handson laboratory research applying the tools and methods used in ongoing ORNL projects in research areas (as appropriate for each teacher's teaching assignment), pedagogy, and leadership. The program will feature telecommunications instruction at the ORNL Regional Science Center and telecommunications will be the primary method used for academic year follow-up and continued interactions with the teachers. Participants in the Teacher Leadership Institute will be hosted by several ORNL research divisions based on each teacher's background and interests. A program coordinator with experience in teacher preparation/higher education delivers instruction in pedagogy and educational lead-

ARC and ORNL also collaborate on a summer science, mathematics, and technology Summer Science Honors Academy for ARC students to participate in research-based programs at ORNL. Student participants (seniors or graduating seniors) will be selected from

secondary schools throughout the ARC region. Students will be teamed with research mentors to participate in hands-on laboratory research applying the tools and methods used in ongoing ORNL projects. Students will also receive telecommunications instruction at the ORNL Regional Science Center.

Terry L. Lashley, Education Partnerships Team Leader Oak Ridge National Laboratory Office of University and Science Education PO Box 2008 5500A, MS 6366 Oak Ridge, TN 37831-6366 (423) 574-0689 / Fax: (423) 241-6726 E-mail: TL7@ornl.gov

### ▶Department of the Interior (DOI)

#### **Bureau of Land Management** Eastern States Office

This office provides information about educational programs, materials, and local landmanagement issues.

Education Coordinator Bureau of Land Management 7450 Boston Boulevard Springfield, VA 22153 (703) 440-1713

### Career Oriented Science and **Mathematics Integrated Course** (COSMIC)

This three-week summer program is designed to encourage girls in exploring future careers in the fields of science and math. Participants meet women professionals in various fields.

Gail B. Rainey, Physical Oceanographer 1201 Elmwood Park Boulevard New Orleans, LA 70123 (504) 736-2792 / Fax: (504) 736- 2610

### Minerals Management Service (MMS) Regional Office

The MMS Regional Office provides a range of educational services. Teacher inservice programs and classroom visitations may include supplemental materials. Availability may be limited, but arrangements may be made for duplication of some materials at minimal cost.

Gulf of Mexico Outer Continental Shelf Region Minerals Management Service Office of Public Affairs 1201 Elmwood Park Boulevard, MS 5000 New Orleans, LA 70123-2394 (504) 736-2595 (800) 200-GULF / Fax: (504) 736-2459



#### **Project WILD**

Project WILD offers teacher training and educational materials. Teacher guides, free to teachers who attend the training session, contain more than 80 supplementary, interdisciplinary activities for grades K–12.

Jerry deBin, Project WILD Coordinator Alabama Division of Game and Fish 64 North Union Street Montgomery, AL 36130 (205) 242-3623 / Fax: (205) 242-3032

#### **Russell Cave National Monument**

Programs include guided tours that focus on the anthropology and geology of the monument.

Division of Interpretation Russell Cave National Monument Route 1, Box 175 Bridgeport, AL 35740 (205) 495-2672

#### Wheeler National Wildlife Refuge

Refuge programs include guided tours and lectures that focus on wildlife management. Teacher workshops include: Project WILD, Aquatic WILD, Project Learning Tree, and Project Learning Tree Facilitator's Workshop. The workshops allow environmental education to be taught to teachers through handson activities. The workshops help teachers investigate environmental issues and encourages them to pass these learning experiences on to their students. Participating teachers receive college credit for attendance and completion of the workshops.

Rick Huffines, Supervisory Ranger Wheeler NWR Route 4, Box 250 Decatur, AL 35603 (205) 350-6639 / Fax: (205) 340-9728 E-mail: r4rw\_al.wlr@mail.fws.gov

### ► Department of Labor (DOL)

### Job Training Partnership Act (JTPA) Liaison

The JTPA Liaison can provide information about the Job Training Partnership Act State and local programs for economically disadvantaged adults and youth.

Charles B. Stults, Chief
Job Training Division
Alabama Department of Economic and
Community Affairs
401 Adams Avenue
PO Box 5690
Montgomery, AL 36103-5690
(205) 242-5300 / Fax: (205) 242-5855

### ► Department of Transportation (DOT)

### Federal Aviation Administration (FAA) Aviation Education

The FAA Aviation Education Representative coordinates aviation education services, including materials and programs for the FAA in the States assigned to the region.

Programs include the following:

- ▶ The Aviation Career Education (ACE)
  Academy is a one-week summer aviation
  education program for high school students sponsored by the FAA along with a
  host educational institution. The program
  provides students with diverse experiences
  in aviation career exploration. The focus
  is on aviation career clusters identified by
  FAA, with an emphasis on opportunities
  for women and minorities. A goal is to
  have one program in each State and U.S.
  Territory. The FAA will conduct regional
  leadership workshops and provide funds
  based on the availability of resources.
- Aviation Education Workshops for Teachers provide teachers with information on FAA aviation programs and materials and prepare them to teach aviation in the classroom. Annual workshops are conducted at colleges and universities across the Nation. The FAA provides information, materials, and speakers for the program.
- National Congress on Aviation and Space Education is sponsored annually by the FAA in partnership with the National Aeronautics and Space Administration and the Civil Air Patrol. The meeting includes teacher workshops and crosstalk sessions to exchange ideas on promoting aerospace education.

George Burnette, ASO-17B.1, FAA Aviation Education Representative 1701 Columbia Avenue College Park, GA 30337 (404) 305-5350 / Fax: (404) 305-5312

### FAA Aviation Education Resource Centers

Located at colleges, museums, and State aviation authority offices, these centers function as information distribution centers for Federal Aviation Administration education materials and resources. The Resource Centers maintain and provide quantities of printed materials, videotapes, and computer educational software. Center personnel can also provide general information, conduct workshops, and make aviation-related presentations.

Megan Johnson, Director Aviation Education Resource Center Alabama Aviation and Technical College Learning Resource Center PO Box 1209 Ozark, AL 36361 (205) 774-5113

Michele R. Walker, Programming Coordinator Aviation Education Resource Center University of North Alabama UNA Box 5145 Florence, AL 35632-0001 (205) 760-4623

Gary W. Kiteley, Executive Director Aviation Education Resource Center University Aviation Association 3410 Skyway Drive Opelika, AL 36801 (205) 844-2434

## ► Environmental Protection Agency (EPA)

#### **EPA Regional Office**

This office takes part in a variety of environmental education programs for both teachers and students. Programs range from teacher workshops and student contests to in-school presentations. Information on environmental issues is also available through the Public Information Center located at the office.

Rich Nawyn, Environmental Education Coordinator Environmental Protection Agency 100 Alabama Street SW Atlanta, GA 30303 (404) 562-8320 / Fax: (404) 562-8335

### The President's Environmental Youth Awards (PEYA) Program

Young people from each State are invited to participate in PEYA, a nationwide program designed to encourage individuals, school classes, summer camps, public interest groups, and youth organizations to promote environmental awareness and community involvement. The two components of the program are the regional certificate program and the National awards competition. Regional certificates, signed by the President, are awarded to each participant by EPA Regional Offices. National individual project winners, or one representative from a National awardwinning group project, along with one sponsor, are honored at EPA headquarters in Washington, DC. Interested K-12 individuals or groups may obtain application materials and contest rules by contacting the EPA Regional Office that serves their State. PEYA



has been an ongoing project since it was created by the White House Office of Education and the EPA in 1971.

EPA Region 4 100 Alabama Street SW Atlanta, GA 30303 (404) 562-8314 / Fax: (404) 562-8335

### ► National Aeronautics and Space Administration (NASA)

#### **NASA Educator Resource Center**

The Center has NASA-related educational materials in various formats, including laserdiscs, CD-ROMs, videotapes, slides, audiotapes, publications, and teacher guides. Educators may preview or copy NASA materials upon request.

U.S. Space and Rocket Center NASA Educator Resource Center for Marshall Space Flight Center PO Box 070015 Huntsville, AL 35807-7015 (205) 544-5812

#### **NASA Field Centers**

Each field center has an educational programs officer who is responsible for precollege education programs. In addition to administering National programs, the center offers programs and services to meet regional and local needs.

Jim Pruitt, Acting Director Education Programs Office Mail Code CL01 NASA Marshall Space Flight Center Huntsville, AL 35812-0001 (205) 544-8800

#### **Space Grant Consortium**

The Space Grant Consortium in each State consists of colleges, universities, industry, and other organizations that have an interest in aeronautics and space education. Each consortium receives NASA funds for use in implementing a balanced program of research, education, and public service.

Alabama Space Grant Consortium University of Alabama in Huntsville Materials Science Building, Room 205 Huntsville, AL 35899 (205) 895-6800

### Florida

### ▶ Department of Agriculture (USDA)

#### 4-H State Leader

The State 4-H Youth Development Programs are administered by the Cooperative Extension Service at land-grant universities. State 4-H leaders coordinate outreach services and training to all county offices.

Dr. Susan G. Fisher, Assistant Dean 4-H and Youth Development University of Florida PO Box 110225 Gainesville, FL 32611-0225 (352) 846-0996 / Fax: (352) 846-0999 E-mail: sgf@gnv.ifas.ufl.edu

#### Ag in the Classroom State Leader

This program promotes increased understanding of agriculture and possible careers in the agricultural sciences. With National leadership provided by USDA, each State manages its own programs, with assistance from agribusiness, educational institutions, and government.

Doty Wenzel 545 East Tennessee Black Building, Room 206 Tallahassee, FL 32308 (904) 487-4973 / Fax: (904) 922-2189

### ► Department of Commerce (DOC)

### Apalachicola Bay National Estuarine Research Reserve

The reserve offers onsite and outreach education programs, including natural history field trips and classroom estuarine curricula.

Eric Lovestrand, Education Coordinator Apalachicola Bay National Estuarine Research Reserve 261 Seventh Street Apalachicola, FL 32320 (904) 653-8063 / Fax: (904) 653-2297

### Atlantic Oceanographic and Meteorological Laboratory

The laboratory manages a speaker's bureau for in-school presentations and also supports a partnership program with local schools. It provides opportunities for students to participate in an Executive Intern Program,

Summer Intern Program, and Laboratory Research Program.

Dr. Howard A. Friedman
(Hurricane Information)
Atlantic Oceanographic and Meteorological
Laboratory
National Oceanic and Atmospheric
Administration
Hurricane Research Division
4301 Rickenbacker Causeway, Virginia Key
Miami, FL 33149
(305) 361-4400 / Fax: (305) 361-4402
E-mail: friedman@aoml.erl.gov

### Florida Keys National Marine Sanctuary

The sanctuary offers onsite, in-the-water interpretive programs for students of all ages. In-school presentations may also be arranged. This sanctuary manages Key Largo and Looe Key education programs. Brochures about coral reef ecosystems are available.

Laura Urian, Education Coordinator Florida Keys National Marine Sanctuary PO Box 1083 Key Largo, FL 33037 (305) 451-1644 / Fax: (305) 451-3193

### Marine Fisheries Southeast Regional Office

This office supports a partnership program with local schools and coordinates a speaker's bureau that provides marine biologists for classroom visits.

Dan Furlong, Deputy Regional Director National Marine Fisheries Service, Southeast Region National Oceanic and Atmospheric

Administration 9721 Executive Center Drive North St. Petersburg, FL 33702-2432 (813) 570-5301 / Fax: (813) 570-5300

### National Sea Grant College Program, Operation Pathfinder

The program consists of two-week summer courses that present an introduction to oceanographic and coastal processes. Courses are available in six regions and are designed to enhance skills in science teaching.

Sharon Walker Mississippi-Alabama Sea Grant Consortium and Gulf Coast Research Laboratory PO Box 7000 Ocean Springs, MS 39566-7000 (601) 374-5550 / Fax: (601) 374-5559

### Rookery Bay National Estuarine Research Reserve

In addition to workshops for teacher and environmental professionals, the reserve also



provides field studies, onsite boat tours for students, and outreach programs.

Ginger Hinchcliff, Education Coordinator Rookery Bay National Estuarine Research Reserve 10 Shell Island Road Naples, FL 33962 (941) 417-6310 / Fax: (941) 417-6315

### ► Department of Defense (DoD)

#### Air Force Armament Museum

The museum displays aircraft and the advancement of technology in missile and rocket science. Exhibits include missiles, launching and targeting systems, and the historical aspects of rocket science.

Air Force Armament Museum 100 Museum Drive Eglin Air Force Base, FL 32542-5000 (904) 882-4062

### Chief of Naval Education and Training, Pensacola

This individual coordinates participation in the Navy Community Service Program through formation of partnerships with schools and other youth organizations throughout the panhandle of Florida. The Naval Education and Training Program Management Support Activity (NETPMSA) is also available for students and teachers in the Pensacola area.

CNET, Pensacola FL Chief of Naval Education and Training 250 Dallas Street Code OOK Pensacola, FL 32508-5100 (904) 452-4837

#### National Museum of Naval Aviation

The museum is dedicated to the aviation history of the Navy, the Marine Corps, and the Coast Guard. Exhibits include an actual bridge and flight deck of an aircraft carrier, as well as numerous exhibits that focus on the technology of naval aeronautics. The museum has 250,000 square feet of display space and more than 100 actual aircraft on display. Tours are available upon request.

National Museum of Naval Aviation 1750 Radford Boulevard, Suite C Pensacola, FL 32508-5402 (904) 452-3604

#### Naval Base, Jacksonville

The base participates in the Navy Community Service Program through formation of partnerships with schools and other youth organizations throughout Florida and in Georgia, Alabama, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee.

COMNAVBASE, Jacksonville Commander Naval Base Jacksonville Naval Air Station, Box 102, Attn. FSC Jacksonville, FL 32212-0102 (904) 772-5380

### ▶ Department of Education (ED)

### Eisenhower Consortium for Mathematics and Science Education at SERVE

The Eisenhower Regional Consortium provides information and technical assistance to help States and school districts improve mathematics and science education.

Francena Cummings, Director
Eisenhower Consortium for Mathematics and
Science Education at SERVE
345 South Magnolia Drive, Suite D-23
Tallahassee, FL 32301-2950
(800) 854-0476
(904) 671-6033 / Fax: (904) 671-6010
WWW: http://www.serve.org/Eisenhower

#### **Eisenhower State Coordinators**

Eisenhower State Coordinators administer the Eisenhower Professional Development Program State Formula grants. The program focuses on sustained and intensive high-quality professional development through inservice programs.

Peggy Primicerio, Coordinator Eisenhower Professional Development Program Florida Department of Education 554 Turlington Building 325 West Gaines Street Tallahassee, FL 32399-0400 (850) 488-6547 / Fax: (850) 413-7698

### **Eisenhower State Coordinators for Higher Education**

Eisenhower State Coordinators oversee the Eisenhower Professional Development State Formula Grants for the State Agency for Higher Education (SAHE). The program focuses on teacher enhancement through both inservice and preservice programs.

Debra Armenti Feldt, Coordinator Eisenhower Higher Education Program Florida Department of Education 554 Turlington Building 325 West Gaines Street Tallahassee, FL 32399-0400 (850) 488-6547 / Fax: (850) 413-7698

# Southeast and Islands Regional Technology in Education Consortium (SEIR\*TEC)

ED established the Regional Technology in Education Consortia (R\*TEC) program in the fall of 1995 to help States, districts, schools, adult literacy centers, and other educational institutions use advanced technology to support improved teaching and student achievement. R\*TEC's role in educational technology is unique in two ways: the emphasis is regional and the primary goal is to ensure that technology is used effectively to support school reform. Program strategies include professional development, technical assistance, and information dissemination.

Don Holznagel, Director, SEIR\*TEC 41 Marietta Street NW, Suite 1000 Atlanta, GA 30303 (800) 659-3204 (404) 893-0100 / Fax: (404) 577-7812 E-mail: dholznag@serve.org
WWW: http://www.serve.org/seir-tec/

Deborah Williams, R\*TEC Project Officer U.S. Department of Education, OERI ORAD/SLSD, Room 504f 555 New Jersey Avenue NW Washington, DC 20208-5644 (202) 219-2204 E-mail: Deborah\_Williams@ed.gov

### SouthEastern Regional Vision for Education (SERVE)

SERVE identifies effective teaching techniques and school improvement efforts within the region and shares this information with State and local educators.

Roy H. Forbes, Executive Director SERVE PO Box 5367 Greensboro, NC 27435 (800) 755-3277 (910) 334-3211 / Fax: (910) 334-3268 WWW: http://www.serve.org/

SERVE, Florida 345 South Magnolia Drive, Suite D-23 Tallahassee, FL 32301-2950 (800) 352-6001 (904) 671-6000 / Fax: (904) 671-6010



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### ► Department of Energy (DOE)

#### Pinellas Plant

The plant sponsors numerous Educational Outreach programs. The DOE Science Bowl is a major event that encourages high school students to compete and test their science knowledge. Regional winners are provided an opportunity to compete in the Nationals. National winners move to the ultimate level when they compete in an international setting. The event requires the participation of more than 100 Pinellas Plant employees. Several employees are mentors and tutors throughout the Pinellas Plant School system. Employees volunteer year round for special events at schools, including science fairs and career days. Significant financial support is provided to the Pinellas County Education Foundation (PCEF), a fundraising organization for the school system. PCEF provides scholarships to underpriviledged students and supports those programs that go above and beyond the standard curriculum.

Brenda Ricchi, Specialist—Public Affairs Pinellas Plant PO Box 2908 Largo, FL 33779-2908 (813) 541-8516 / Fax: (813) 541-8778 E-mail: Brend\_L. Ricchi@ccmail.orl.mmc.com

### ► Department of the Interior (DOI)

# Arthur R. Marshall Loxahatchee and Hobe Sound National Wildlife Reserves

The reserves offer a 26-page manual designed to help teachers introduce their students to the National Wildlife Refuge System, these refuges, and the Northern Everglades habitat. In addition, the manual includes several curriculum ideas for teachers of elementary students. Information is also provided on planning a visit, field trip ideas for groups, available facilities, and additional references.

Serena Rinker, Supervisory Interpretive Specialist Arthur R. Marshall Loxahatchee NWR/ Hobe Sound NWR 10216 Lee Road Boynton Beach, FL 33437 (407) 732-3684 / Fax: (407) 369-7190

#### **Biscayne National Park**

The park operates the Adams Key Environmental Education Center, which offers environmental education programs for students. Teachers must attend a workshop prior to participating. The curriculum-based program allows participants to observe and study the interrelationships between a marine and terrestrial environment. The program includes a three-day, two-night field trip.

Juan Rodriguez, Environmental Education Coordinator Biscayne National Park PO Box 1369 Homestead, FL 33090 (305) 230-1144, ext. 3036 Fax: (305) 230-1190

### **Bureau of Land Management Eastern States Office**

This office provides information about educational programs, materials, and local land-management issues.

Education Coordinator Bureau of Land Management 7450 Boston Boulevard Springfield, VA 22153 (703) 440-1713

#### Canaveral National Seashore

The seashore offers environmental education, as well as natural and cultural history programs on both ends of the Barrier Island. Guided tours and teacher guides are also available.

Programs include the following:

- The Canaveral National Seashore and Merritt Island National Wildlife Refuge/Education Workshop Environmental Education Program is offered by the South District. In this program, educators spend a half day onsite learning how to conduct programs for their fifth grade classes. Another program is the Mind Boggling Mosquito Lagoon. Students are involved in two activities, which include a two-hour tour of the lagoon and a mock development project. In Seashore Discovery, students spend two hours learning about the wildlife that inhabits the beach, sea turtles that nest on the beach, and hurricanes and coastal development. Educators participate in workshops that enable them to assist park rangers in leading onsite activities.
- Parks as Classrooms, offered by the North District, is a program in which students are introduced to four sensitive environments: Mosquito Lagoon, Turtle Mound, Ocean, and Sand Dunes, all of which face threats that could impact the park. The students become aware of their responsibility in protecting the environment for future generations. The Seashore Junior Ranger Program consists of multiple activities, including: Lagoon Experience, Turtle Mound, Crabbing and Clamming at Canaveral, Wildlife in the

Park, and Sea Turtles. By attending three educational activities and by doing a parkrelated project, children ages 6–14 may become Seashore Rangers.

Lisa Okayaki, South District Interpreter Canaveral National Seashore 308 Julia Street Titusville, FL 32796 (407) 867-4077 / Fax: (407) 867-4447

Mike Maslona, North District Ranger Canaveral National Seashore 7611 South Atlantic Avenue New Smyrna Beach, FL 32169 (904) 428-384 / Fax: (904) 423-8592

# Career Oriented Science and Mathematics Integrated Course (COSMIC)

This three-week summer program is designed to encourage girls in exploring future careers in the fields of science and math. Participants meet women professionals in various fields.

Gail B. Rainey, Physical Oceanographer 1201 Elmwood Park Boulevard New Orleans, LA 70123 (504) 736-2792 / Fax: (504) 736-2610

#### **Everglades National Park**

The park operates six sites that manage environmental education programs, including teacher workshops that offer college or professional credit. Guided tours, lectures, and comprehensive curriculum materials are also available. In the Environmental Education Program, students are introduced to the Everglades ecosystem through hands-on, curriculum-based activities. Students and teachers can participate in a variety of programs (ranging from a four-hour day trip to a threeday camping experience). Teacher workbooks and activity guides are available. A workshop is mandatory for teachers.

Neil DeJong, Environmental Education Coordinator Everglades National Park 40001 State Road 9336 Homestead, FL 33034 (305) 242-7753 / Fax: (305) 242-7728

#### First Coast Envirothon

High school students from local counties compete in an outdoor "quiz bowl." Teams of students are trained and tested in five areas: soils, water, forestry, wildlife, and current environmental issues. Winning teams compete in State and National programs.

Linda D. Finger, Wildlife Biologist Jacksonville Field Office 6620 Southpoint Drive South, Suite 310 Jacksonville, FL 32216 (904) 232-2580 / Fax: (904) 232-2404



#### Fort Caroline National Monument

The monument offers onsite programs for students and in-school presentations during the school year. Programs emphasize natural resource issues found in the school curricula.

Division of Interpretation Fort Caroline National Monument 12713 Fort Caroline Road Jacksonville, FL 32225 (904) 221-5568

#### **Gulf Islands National Seashore**

Programs at the seashore focus on environmental education and include nature walks, ranger lectures, and other activities. Teacher guides are also available upon request. The Barrier Island Ecology Talk stresses barrier island dynamics, ecology, and importance.

H.O. Simpson, Florida District Interpreter Gulf Islands NS 1801 Gulf Breeze Parkway Gulf Breeze, FL 32561 (904) 934-2629 / Fax: (904) 932-9654

### J.N."Ding" Darling National Wildlife Refuge

Guided tours and curriculum materials are available to educators at the refuge.

Public Use Manager J.N. "Ding" Darling National Wildlife Refuge One Wildlife Drive Sanibel, FL 33957 (813) 472-1100 / Fax: (813) 472-4061

### Minerals Management Service (MMS) Regional Office

The MMS Regional Office provides a range of educational services. Teacher inservice programs and classroom visitations may include supplemental materials. Availability may be limited, but arrangements may be made for duplication of some materials at minimal cost.

Gulf of Mexico Outer Continental Shelf Region Minerals Management Service Office of Public Affairs 1201 Elmwood Park Boulevard, MS 5000 New Orleans, LA 70123-2394 (504) 736-2595 (800)-200-GULF / Fax: (504) 736-2459

#### **Project WILD**

Project WILD offers teacher training and educational materials. Teacher guides, free to teachers who attend the training session, contain more than 80 supplementary, interdisciplinary activities for grades K–12.

Tim Roach, Project WILD Coordinator Florida Game and Freshwater Fish Commission 620 South Meridian Street Tallahassee, FL 32399 (904) 488-4677 / Fax: (904) 488-6988

#### St. Marks National Wildlife Refuge

The refuge offers guided tours, teacher workshops, teacher guides, and in-class presentations. In the Environmental Education Program, students from roughly a 100-mile radius come to the refuge to study its ecosystems, especially the freshwater and saltwater ecosystems. Also available is an educator's guide and lesson plans for hands-on activities, which can be conducted offsite.

Robin Will, Wildlife Interpretive Specialist St. Marks NWR PO Box 68 St. Marks, FL 32355 (904) 925-6121 / Fax: (904) 925-6930

### ► Department of Labor (DOL)

### Job Training Partnership Act (JTPA) Liaison

The JTPA Liaison can provide information about the Job Training Partnership Act State and local programs for economically disadvantaged adults and youth.

Shirley Gooding, Secretary
Florida Department of Labor and
Employment Security
2012 Capital Circle, Southeast
Suite 303, Hartman Building
Tallahassee, FL 32399-2152
(904) 922-7021 / Fax: (904) 488-8930

### ► Department of Transportation (DOT)

### Federal Aviation Administration (FAA) Aviation Education

The FAA Aviation Education Representative coordinates aviation education services, including materials and programs for the FAA in the States assigned to the region.

Programs include the following:

► The Aviation Career Education (ACE)
Academy is a one-week summer aviation
education program for high school students sponsored by the FAA along with a
host educational institution. The program
provides students with diverse experiences

in aviation career exploration. The focus is on aviation career clusters identified by FAA, with an emphasis on opportunities for women and minorities. A goal is to have one program in each State and U.S. Territory. The FAA will conduct regional leadership workshops and provide funds based on the availability of resources.

- ▶ Aviation Education Workshops for Teachers provide teachers with information on FAA aviation programs and materials and prepare them to teach aviation in the classroom. Annual workshops are conducted at colleges and universities across the Nation. The FAA provides information, materials, and speakers for the program.
- ▶ National Congress on Aviation and Space Education is sponsored annually by the FAA in partnership with the National Aeronautics and Space Administration and the Civil Air Patrol. The meeting includes teacher workshops and crosstalk sessions to exchange ideas on promoting aerospace education.

George Burnette, ASO-17B.1 FAA Aviation Education Representative 1701 Columbia Avenue College Park, GA 30337 (404) 305-5350 / Fax: (404) 305-5312

Larry Hedman, CMD-240 FAA Aviation Education Representative Aviation Education Resource Centers Center for Management Development 4500 Palm Coast Parkway SE Palm Coast, FL 32137 (904) 446-7126

### FAA Aviation Education Resource Centers

Located at colleges, museums, and State aviation authority offices, these centers function as information distribution centers for Federal Aviation Administration education materials and resources. The Resource Centers maintain and provide quantities of printed materials, videotapes, and computer educational software. Center personnel can also provide general information, conduct workshops, and make aviation-related presentations.

Patricia Fleener-Ryan Aviation Education Resource Center Embry-Riddle Aeronautical University AvEd Teacher Resource Center Daytona Beach, FL 32114 (904) 226-6499



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J. Anthony Sharp, Director Aviation Education Resource Center Florida Memorial College Division of Airway Science 15800 Northwest 42nd Avenue Miami, FL 33054 (305) 623-1440

Dr. Ballard M. Barker, Head Aviation Education Resource Center Florida Institute of Technology Department of Aviation Studies The School of Aeronautics 150 West University Boulevard Melbourne, FL 32901-6988 (407) 768-8000, ext. 8120

Larry Hedman, CMD-240 Center for Management Development 4500 Palm Coast Parkway, SE Palm Coast, FL 32137 (904) 446-7126

### ► Environmental Protection Agency (EPA)

### Environmental Research Laboratory

The laboratory supports the Educational Research Center of the University of West Florida in an effort to build and enhance environmental education at the State and local levels. Programs for teachers and curriculum materials are being developed.

Betty Jackson U.S. Environmental Protection Agency Environmental Research Laboratory/ORD Sabine Island Gulf Breeze, FL 32561-3999 (904) 934-9200

#### **EPA** Regional Office

This office takes part in a variety of environmental education programs for both teachers and students. Programs range from teacher workshops and student contests to in-school presentations. Information on environmental issues is also available through the Public Information Center located at the office.

Rich Nawyn, Environmental Education Coordinator Environmental Protection Agency 100 Alabama Street SW Atlanta, GA 30303 (404) 562-8320 / Fax: (404) 562-8335

### The President's Environmental Youth Awards (PEYA) Program

Young people from each State are invited to participate in PEYA, a nationwide program designed to encourage individuals, school classes, summer camps, public interest

groups, and youth organizations to promote environmental awareness and community involvement. The two components of the program are the regional certificate program and the National awards competition. Regional certificates, signed by the President, are awarded to each participant by EPA Regional Offices. National individual project winners, or one representative from a National awardwinning group project, along with one sponsor, are honored at EPA headquarters in Washington, DC. Interested K-12 individuals or groups may obtain application materials and contest rules by contacting the EPA Regional Office that serves their State. PEYA has been an ongoing project since it was created by the White House Office of Education and the EPA in 1971.

EPA Region 4 100 Alabama Street SW Atlanta, GA 30303 (404) 562-8314 / Fax: (404) 562-8335

# National Aeronautics and Space Administration (NASA)

#### **NASA Educator Resource Center**

The Center has NASA-related educational materials in various formats, including laserdiscs, CD-ROMs, videotapes, slides, audiotapes, publications, and teacher guides. Educators may preview or copy NASA materials upon request.

NASA John F. Kennedy Space Center Educator Resource Center Mail Code ERC Kennedy Space Center, FL 32899-0001 (407) 867-4090

#### **NASA Field Centers**

Each field center has an educational programs officer who is responsible for precollege education programs. In addition to administering National programs, the center offers programs and services to meet regional and local needs.

Steve Dutczak, Chief Education Services Branch NASA John F. Kennedy Space Center Mail Code PA-ESB Kennedy Space Center, FL 32899-0001 (407) 867-4444

#### **Space Grant Consortium**

The Space Grant Consortium in each State consists of colleges, universities, industry, and other organizations that have an interest in aeronautics and space education. Each consortium receives NASA funds for use in

implementing a balanced program of research, education, and public service.

Florida Space Grant Consortium 405 Space Sciences Research Building Department of Astronomy University of Florida Gainesville, FL 32611-0961 (904) 392-6750

### Georgia

### ► Department of Agriculture (USDA)

#### 4-H State Leader

The State 4-H Youth Development Programs are administered by the Cooperative Extension Service at land-grant universities. State 4-H leaders coordinate outreach services and training to all county offices.

Dr. Roger C. Ryles, Jr., State 4-H Program Leader State 4-H Office Hoke Smith Annex University of Georgia Athens, GA 30602 (706) 542-8804 / Fax: (706) 542-8845 E-mail: cdc4H@uga.cc.uga.edu

#### Ag in the Classroom State Leader

This program promotes increased understanding of agriculture and possible careers in the agricultural sciences. With National leadership provided by USDA, each State manages its own programs, with assistance from agribusiness, educational institutions, and government.

Donna Reynolds Georgia Farm Bureau PO Box 7068 Macon, GA 31298 (912) 474-8411

### Department of Commerce (DOC)

### Gray's Reef National Marine Sanctuary

The sanctuary's Interpretive Center is located at the University of Georgia Aquarium on Skidaway Island. The center offers



classrooms, laboratories, exhibits, touch tanks, and lecture series for educators.

Sarah Mitchell, Education Coordinator Gray's Reef National Marine Sanctuary 10 Ocean Science Circle Savannah, GA 31411 (912) 598-2345 / Fax: (912) 598-2367

#### National Sea Grant College Program, Operation Pathfinder

The program consists of two-week summer courses that present an introduction to oceanographic and coastal processes. Courses are available in six regions and are designed to enhance skills in science teaching.

Sharon Walker Mississippi-Alabama Sea Grant Consortium and Gulf Coast Research Laboratory PO Box 7000 Ocean Springs, MS 39566-7000 (601) 374-5550 / Fax: (601) 374-5559

### Sapelo Island National Estuarine Research Reserve

The reserve offers education tours for school groups, including special archaeological and natural history tours. Reservations are required.

Fred Hay, Education Coordinator Sapelo Island National Estuarine Research Reserve Georgia Department of National Resources PO Box 15

Sapelo Island, GA 31327 (912) 485-2251 / Fax: (912) 485-2141

### ▶ Department of Defense (DoD)

#### **National Science Center**

With its multifaceted programs in science and mathematics, the center offers workshops and camps for students, a discovery center with opportunities for classroom visits, and a teacher resource center that provides science, math, electronics, and computer materials for use in the classroom. Portable planetariums are available on loan to teachers who have been certified through the Center's comprehensive training program.

National Science Center Attention: ATZH-NSC-D Building 25722 Fort Gordon, GA 30905-5689 (706) 791-7621

#### Naval Submarine Base, Kings Bay

The base participates in the Navy Community Service Program through formation of partnerships with schools and other youth organizations throughout the Kings Bay area.

COMSUBGRU TEN Commander Submarine Group Ten 1050 USS Georgia Avenue Kings Bay, GA 31547-2609 (912) 673-4005

### U.S. Army Signal Corps and Fort Gordon Museum

The evolution of communications technology is the primary focus of the museum. Tours and lectures are available upon request.

U.S. Army Signal Corps and Fort Gordon Museum Attention: ATZH-SM Building 36305 Fort Gordon, GA 30905-5273 (706) 791-3856

### Department of Education (ED)

## Eisenhower Consortium for Mathematics and Science Education at SERVE

The Eisenhower Regional Consortium provides information and technical assistance to help States and school districts improve mathematics and science education.

Francena Cummings, Director
Eisenhower Consortium for Mathematics and
Science Education at SERVE
345 South Magnolia Drive, Suite D-23
Tallahassee, FL 32301-2950
(800) 854-0476
(904) 671-6033 / Fax: (904) 671-6010
WWW: http://www.serve.org/Eisenhower

#### **Eisenhower State Coordinators**

Eisenhower State Coordinators administer the Eisenhower Professional Development Program State Formula grants. The program focuses on sustained and intensive high-quality professional development through inservice programs.

Dick Grover, Eisenhower Professional Development Program Georgia Department of Education School Support Services Unit 1762 Twin Towers East Atlanta, GA 30334 (404) 656-2403 / Fax: (404) 651-8984

### **Eisenhower State Coordinators** for Higher Education

Eisenhower State Coordinators oversee the Eisenhower Professional Development State Formula Grants for the State Agency for Higher Education (SAHE). The program focuses on teacher enhancement through both inservice and preservice programs.

Russell Yeahy and Edward J. Davis Eisenhower Professional Development Program University of Georgia 315 Aderhold Hall Athens, GA 30602 (706) 542-4047 / Fax: (706) 542-4042

# Southeast and Islands Regional Technology in Education Consortium (SEIR\*TEC)

ED established the Regional Technology in Education Consortia (R\*TEC) program in the fall of 1995 to help States, districts, schools, adult literacy centers, and other educational institutions use advanced technology to support improved teaching and student achievement. R\*TEC's role in educational technology is unique in two ways: the emphasis is regional and the primary goal is to ensure that technology is used effectively to support school reform. Program strategies include professional development, technical assistance, and information dissemination.

Don Holznagel, Director, SEIR\*TEC 41 Marietta Street NW, Suite 1000 Atlanta, GA 30303 (800) 659-3204 (404) 893-0100 / Fax: (404) 577-7812 E-mail: dholznag@serve.org WWW: http://www.serve.org/seir-tec/

Deborah Williams, R\*TEC Project Officer U.S. Department of Education, OERI ORAD/SLSD, Room 504f 555 New Jersey Avenue NW Washington, DC 20208-5644 (202) 219-2204 E-mail: Deborah\_Williams@ed.gov

### SouthEastern Regional Vision for Education (SERVE)

SERVE identifies effective teaching techniques and school improvement efforts within the region and shares this information with State and local educators.

Roy H. Forbes, Executive Director SERVE PO Box 5367 Greensboro, NC 27435 (800) 755-3277 (910) 334-3211 / Fax: (910) 334-3268 WWW: http://www.serve.org/



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SERVE, Georgia 41 Marietta Street NW, Suite 1000 Atlanta, GA 30303 (404) 577-7737 (800) 659-3204 / Fax: (404) 577-7812

### ► Department of Energy (DOE)

### Appalachian Regional Commission (ARC) and Oak Ridge National Laboratory (ORNL)

A summer science, mathematics, and technology Teacher Leadership Institute is available for secondary teachers to participate in research-based programs at ORNL. The institute is provided in a two-week summer residential format patterned after the ORNL/National Science Foundation (NSF) National Teacher Enhancement Project and Leadership Institute. Participants are selected by the ARC from secondary schools throughout the ARC region. The focus is on handson laboratory research applying the tools and methods used in ongoing ORNL projects in research areas (as appropriate for each teacher's teaching assignment), pedagogy, and leadership. The program will feature telecommunications instruction at the ORNL Regional Science Center and telecommunications will be the primary method used for academic year follow-up and continued interactions with the teachers. Participants in the Teacher Leadership Institute will be hosted by several ORNL research divisions based on each teacher's background and interests. A program coordinator with experience in teacher preparation/higher education delivers instruction in pedagogy and educational leadership.

ARC and ORNL also collaborate on a summer science, mathematics, and technology Summer Science Honors Academy for ARC students to participate in research-based programs at ORNL. Student participants (seniors or graduating seniors) will be selected from secondary schools throughout the ARC region. Students will be teamed with research mentors to participate in hands-on laboratory research applying the tools and methods used in ongoing ORNL projects. Students will also receive telecommunications instruction at the ORNL Regional Science Center.

Terry L. Lashley, Education Partnerships Team Leader Oak Ridge National Laboratory Office of University and Science Education PO Box 2008 5500A, MS 6366 Oak Ridge, TN 37831-6366 (423) 574-0689 / Fax: (423) 241-6726

### ▶ Department of the Interior (DOI)

### Bureau of Land Management Eastern States Office

This office provides information about educational programs, materials, and local land-management issues.

Education Coordinator Bureau of Land Management 7450 Boston Boulevard Springfield, VA 22153 (703) 440-1713

E-mail: TL7@ornl.gov

### Chattahoochee River National Recreation Area

Programs include nature walks, ranger lectures, and activities that focus on environmental education. The Chattahoochee Geosphere Center, a cooperative education facility, also offers teacher workshops. Teacher guides are available upon request.

Division of Interpretation Chattahoochee River National Recreation Area 1978 Island Ford Parkway Dunwoody, GA 30350 (404) 399-8070

### Minerals Management Service (MMS) Regional Office

The MMS Regional Office provides a range of educational services. Teacher inservice programs and classroom visitations may include supplemental materials. Availability may be limited, but arrangements may be made for duplication of some materials at minimal cost.

Offshore Minerals Management Technical Communications Service Minerals Management Service 381 Eldon Street, MS 4530 Herndon, VA 20170-4817 (703) 787-1080 / Fax: (703) 787-1186 Office of Communications & Governmental Affairs Education Coordinator Minerals Management Service 1849 C Street NW, LMS4230 Washington, DC 20240-0001 (202) 208-3985 / Fax: (202) 208-3968

### Pinckney Island National Wildlife Refuge

In Barrier Island Ecology, instructors with the University of Georgia and U.S. Fish and Wildlife Service volunteers lead groups on walking tours of a barrier island. The outdoor ecology classes focus on the barrier island ecosystem, with additional instruction provided in management of a pristine maritime forest habitat.

Marsh Meander/Maritime Woods Walk are alternate programs focusing on the salt marsh ecology of the Carolina lowcountry and the hammocks/maritime woodlands prevalent on Pinckney Island. Students are instructed in the value of marshland and coastal islands as buffer zones protecting the mainland during violent storms. Also covered is the richness of wildlife sustained in this coastal zone, with an emphasis on bird identification.

Patricia E. Metz, Refuge Ranger Pinckney Island NWR Savannah Coastal Refuges Parkway Business Center, Suite 10 Business Center Drive Savannah, GA 31405 (912) 652-4415 / Fax: (912) 652-4385

### Piedmont National Wildlife Refuge

Teacher workshops on environmental education are available at the refuge. Scheduled tours can be arranged upon request.

Public Use Manager Piedmont National Wildlife Refuge Route 1, Box 670 Round Oak, GA 31038 (912) 986-5411 / Fax: (912) 986-9646

#### **Project WILD**

Project WILD offers teacher training and educational materials. Teacher guides, free to teachers who attend the training session, contain more than 80 supplementary, interdisciplinary activities for grades K–12.

Ken Riddleberger, Project WILD Coordinator Georgia Wildlife Resources Division 2111 Highway 278 SE Social Circle, GA 30279 (706) 557-3035 / Fax: (706) 557-3030



Richard Osorio, Project WILD Coordinator Rock Eagle 4-H Center 350 Rock Eagle Road Eatonon, GA 31204 (706) 485-2831 / Fax: (706) 485-2191

### Warm Springs Regional Fisheries Center

The Aquatic and Fisheries Math Applications program consists of locally developed prealgebra activities specific to sites on the fish hatchery. Activities include graphic surveying techniques to determine the area of the ponds. Other topics are fisheries statistics, waterflow in a spring, area and volume calculations of fish-rearing containers, and diversity indexes. The center also offers Project WILD/Aquatic WILD, Project Learning Tree Teacher and Youth Leader Workshops, which are taught onsite at a fish hatchery. Additional training includes a tour and discussion of using the hatchery grounds for outdoor classrooms.

Haile Macurdy, Assistant Hatchery Manager Warm Springs Regional Fisheries Center Route 1, Box 515 Warm Springs, GA 31830 (706) 655-3620 / Fax: (706) 655-9034

### ▶ Department of Labor (DOL)

### Job Training Partnership Act (JTPA) Liaison

The JTPA Liaison can provide information about the Job Training Partnership Act State and local programs for economically disadvantaged adults and youth.

David B. Poythress, Commissioner Georgia Department of Labor 148 International Boulevard NE Sussex Place, Room 600 Atlanta, GA 30303 (404) 656-3011 / Fax: (404) 656-2683

### ► Department of Transportation (DOT)

### Federal Aviation Administration (FAA) Aviation Education

The FAA Aviation Education Representative coordinates aviation education services, including materials and programs for the FAA in the States assigned to the region.

Programs include the following:

► The Aviation Career Education (ACE)
Academy is a one-week summer aviation

education program for high school students sponsored by the FAA along with a host educational institution. The program provides students with diverse experiences in aviation career exploration. The focus is on aviation career clusters identified by FAA, with an emphasis on opportunities for women and minorities. A goal is to have one program in each State and U.S. Territory. The FAA will conduct regional leadership workshops and provide funds based on the availability of resources.

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George Burnette, ASO-17B.1 FAA Aviation Education Representative 1701 Columbia Avenue College Park, GA 30337 (404) 305-5350 / Fax: (404) 305-5312

### FAA Aviation Education Resource Centers

Located at colleges, museums, and State aviation authority offices, these centers function as information distribution centers for Federal Aviation Administration education materials and resources. The Resource Centers maintain and provide quantities of printed materials, videotapes, and computer educational software. Center personnel can also provide general information, conduct workshops, and make aviation-related presentations.

Viki Dennard, Assistant Principal Aviation Education Resource Center Conyers Middle School 335 Sigman Road Conyers, GA 30207-3699 (404) 483-3371

Chuck Nyren Aviation Education Resource Center East Cobb Middle School 380 Holt Road Marietta, GA 30068 (404) 971-8397 Joyce Carlton, Director of Education Aviation Education Resource Center Museum of Aviation at Robins AFB PO Box 2469 Warner Robins, GA 31099 (912) 926-4242

Anthony Docal, Director Southern College of Technology Georgia Youth Science & Technology Center 1100 S. Marietta Parkway Marietta, GA 30060-2896 (404) 528-6272

### ► Environmental Protection Agency (EPA)

### Environmental Research Laboratory

The lab offers teacher fellowships, student summer camps, student employment programs, community partnerships, and inschool programs.

Environmental Research Laboratory U.S. Environmental Protection Agency 906 College Station Road Athens, GA 30605-2720 (706) 546-3524

#### **EPA** Regional Office

This office takes part in a variety of environmental education programs for both teachers and students. Programs range from teacher workshops and student contests to in-school presentations. Information on environmental issues is also available through the Public Information Center located at the office.

Rich Nawyn, Environmental Education Coordinator Environmental Protection Agency 100 Alabama Street, SW Atlanta, GA 30303 (404) 562-8320 / Fax: (404) 562-8335

### The President's Environmental Youth Awards (PEYA) Program

Young people from each State are invited to participate in PEYA, a nationwide program designed to encourage individuals, school classes, summer camps, public interest groups, and youth organizations to promote environmental awareness and community involvement. The two components of the program are the regional certificate program and the National awards competition. Regional certificates, signed by the President, are awarded to each participant by EPA Regional Offices. National individual project winners, or one representative from a National awardwinning group project, along with one spon-



sor, are honored at EPA headquarters in Washington, DC. Interested K–12 individuals or groups may obtain application materials and contest rules by contacting the EPA Regional Office that serves their State. PEYA has been an ongoing project since it was created by the White House Office of Education and the EPA in 1971.

EPA Region 4 100 Alabama Street SW Atlanta, GA 30303 (404) 562-8314 / Fax: (404) 562-8335

# ► National Aeronautics and Space Administration (NASA)

#### **NASA Educator Resource Center**

The Center has NASA-related educational materials in various formats, including laserdiscs, CD-ROMs, videotapes, slides, audiotapes, publications, and teacher guides. Educators may preview or copy NASA materials upon request.

NASA John F. Kennedy Space Center Educator Resource Center Mail Code ERC Kennedy Space Center, FL 32899-0001 (407) 867-4090

#### **NASA Field Centers**

Each field center has an educational programs officer who is responsible for precollege education programs. In addition to administering National programs, the center offers programs and services to meet regional and local needs.

Steve Dutczak, Chief Education Services Branch NASA John F. Kennedy Space Center Mail Code PA-ESB Kennedy Space Center, FL 32899-0001 (407) 867-4444

### NASA Regional Educator Resource Center (RERC)

To offer more educators the opportunity to visit the Educator Resource Center Network (ERCN), NASA forms partnerships with planetariums, universities, museums, and other nonprofit organizations to serve as RERCs. Teachers may preview or copy NASA materials upon request.

Southern College of Technology/GYSTC 1100 South Marietta Parkway Marietta, GA 30060-2896 (404) 528-6272

#### **Space Grant Consortium**

The Space Grant Consortium in each State consists of colleges, universities, industry, and other organizations that have an interest in aeronautics and space education. Each consortium receives NASA funds for use in implementing a balanced program of research, education, and public service.

Georgia Space Grant Consortium Georgia Tech Department of Aerospace Engineering Cherry Street Atlanta, GA 30332-0150 (404) 894-8202

### ► National Science Foundation (NSF)

### Statewide Systemic Initiatives (SSI) Program

Georgia's SSI Program includes five regional centers that link schools with university faculty. Program goals include increasing the success of underrepresented groups and developing teachers with strong pedagogical and content foundations, as well as recruiting and retaining a high-quality teaching force. Other goals include developing and implementing interdisciplinary curriculum and designing innovative assessment techniques.

Michael Padilla 212 Aderhold Building University of Georgia Athens, GA 30602-7126 (706) 542-4341 / Fax: (706) 542-4348

### Mississippi

### ▶ Department of Agriculture (USDA)

#### 4-H State Leader

The State 4-H Youth Development Programs are administered by the Cooperative Extension Service at land-grant universities. State 4-H leaders coordinate outreach services and training to all county offices.

Dr. Susan Holder, State Leader 4-H Youth Development PO Box 9601 Mississippi State University Mississippi State, MS 39762 (601) 325-3352 / Fax: (601) 325-8407 E-mail: susanh@mces.msstate.edu

#### Ag in the Classroom State Leader

This program promotes increased understanding of agriculture and possible careers in the agricultural sciences. With National leadership provided by USDA, each State manages its own programs, with assistance from agribusiness, educational institutions, and government.

Clara Bilbo Mississippi Farm Bureau PO Box 1972 Jackson, MS 39215-1972 (601) 977-4824

### ► Department of Commerce (DOC)

### National Sea Grant College Program, Operation Pathfinder

The program consists of two-week summer courses that present an introduction to oceanographic and coastal processes. Courses are available in six regions and are designed to enhance skills in science teaching.

Sharon Walker Mississippi-Alabama Sea Grant Consortium and Gulf Coast Research Laboratory PO Box 7000 Ocean Springs, MS 39566-7000 (601) 374-5550 / Fax: (601) 374-5559

### ► Department of Defense (DoD)

### Opportunities in Coastal Engineering for Academically Talented Students (OCEANS)

Students explore coastal erosion first-hand on a Gulf of Mexico beach and follow up their discoveries with laboratory and classroom work. Topics include Coastal Engineering, Geometry, Surveying, Technical Writing, Career Exploration, Research Methodology, Coastal Geology, Trigonometry, Computer Graphics, Ethics of Engineering. Also included is a three-day Coastal Engineering handson course at the U.S. Army Engineer Waterways Experiment Station.

Stephen Wagner U.S. Army Engineer Waterways Experiment Station 3909 Halls Ferry Road Vicksburg, MS 39180 (601) 634-3000



237

### Science and Engineering Apprentice Program

This program, supported by DoD and administered by The George Washington University, is designed to provide research experience for high school students attending school near this participating research facility. Each student works with a senior scientist or engineer who acts as a mentor for eight weeks during the summer.

Steve Wagner Army Waterways Experiment Station (WES) Vicksburg, MS 39180-6199 (601) 634-3000

Diane Wilson Naval Research Laboratory (NRL-S) Stennis Space Center, MS 39529-5004 (601) 688-4334

### ▶ Department of Education (ED)

### Eisenhower Consortium for Mathematics and Science Education at SERVE

The Eisenhower Regional Consortium provides information and technical assistance to help States and school districts improve mathematics and science education.

Francena Cummings, Director
Eisenhower Consortium for Mathematics and
Science Education at SERVE
345 South Magnolia Drive, Suite D-23
Tallahassee, FL 32301-2950
(800) 854-0476
(904) 671-6033 / Fax: (904) 671-6010
WWW: http://www.serve.org/Eisenhower

#### **Eisenhower State Coordinators**

Eisenhower State Coordinators administer the Eisenhower Professional Development Program State Formula grants. The program focuses on sustained and intensive high-quality professional development through inservice programs.

Dr. Donna Lander and Sandra Crowley Eisenhower Professional Development Program Mississippi Department of Education Walter Sillers Building, Suite 1604 PO Box 771 Jackson, MS 39205-0771 (601) 359-3486 / Fax: (601) 359-2040

### **Eisenhower State Coordinators** for Higher Education

Eisenhower State Coordinators oversee the Eisenhower Professional Development State Formula Grants for the State Agency for Higher Education (SAHE). The program focuses on teacher enhancement through both inservice and preservice programs.

Pearl Pennington
Eisenhower Professional Development
Program
Mississippi Board of Trustees of State
Institutions of Higher Learning
3825 Ridgewood Road
Jackson, MS 39211
(601) 982-6626 / Fax: (601) 982-6610

# Southeast and Islands Regional Technology in Education Consortium (SEIR\*TEC)

ED established the Regional Technology in Education Consortia (R\*TEC) program in the fall of 1995 to help States, districts, schools, adult literacy centers, and other educational institutions use advanced technology to support improved teaching and student achievement. R\*TEC's role in educational technology is unique in two ways: the emphasis is regional and the primary goal is to ensure that technology is used effectively to support school reform. Program strategies include professional development, technical assistance, and information dissemination.

Don Holznagel, Director, SEIR\*TEC 41 Marietta Street NW, Suite 1000 Atlanta, GA 30303 (800) 659-3204 (404) 893-0100 / Fax: (404) 577-7812 E-mail: dholznag@serve.org WWW: http://www.serve.org/seir-tec/

Deborah Williams, R\*TEC Project Officer U.S. Department of Education, OERI ORAD/SLSD, Room 504f 555 New Jersey Avenue NW Washington, DC 20208-5644 (202) 219-2204 E-mail: Deborah\_Williams@ed.gov

### SouthEastern Regional Vision for Education (SERVE)

SERVE identifies effective teaching techniques and school improvement efforts within the region and shares this information with State and local educators.

Roy H. Forbes, Executive Director SERVE PO Box 5367 Greensboro, NC 27435 (800) 755-3277 (910) 334-3211 / Fax: (910) 334-3268 WWW: http://www.serve.org/

SERVE, Mississippi Delta State University PO Box 3183 Cleveland, MS 38733 (601) 846-4384 (800) 326-4548 / Fax: (601) 846-4402

### ▶ Department of Energy (DOE)

### Appalachian Regional Commission (ARC) and Oak Ridge National Laboratory (ORNL)

A summer science, mathematics, and technology Teacher Leadership Institute is available for secondary teachers to participate in research-based programs at ORNL. The institute is provided in a two-week summer residential format patterned after the ORNL/National Science Foundation (NSF) National Teacher Enhancement Project and Leadership Institute. Participants are selected by the ARC from secondary schools throughout the ARC region. The focus is on handson laboratory research applying the tools and methods used in ongoing ORNL projects in research areas (as appropriate for each teacher's teaching assignment), pedagogy, and leadership. The program will feature telecommunications instruction at the ORNL Regional Science Center and telecommunications will be the primary method used for academic year follow-up and continued interactions with the teachers. Participants in the Teacher Leadership Institute will be hosted by several ORNL research divisions based on each teacher's background and interests. A program coordinator with experience in teacher preparation/higher education delivers instruction in pedagogy and educational lead-

ARC and ORNL also collaborate on a summer science, mathematics, and technology Summer Science Honors Academy for ARC students to participate in research-based programs at ORNL. Student participants (seniors or graduating seniors) will be selected from secondary schools throughout the ARC region. Students will be teamed with research mentors to participate in hands-on laboratory research applying the tools and methods used in ongoing ORNL projects. Students will also receive telecommunications instruction at the ORNL Regional Science Center.

Terry L. Lashley, Education Partnerships Team Leader Oak Ridge National Laboratory Office of University and Science Education PO Box 2008 5500A, MS 6366 Oak Ridge, TN 37831-6366 (423) 574-0689 / Fax: (423) 241-6726 E-mail: TL7@ornl.gov



### **▶ Department of the Interior** (DOI)

#### **Bureau of Land Management Eastern States Office**

This office provides information about educational programs, materials, and local landmanagement issues.

Education Coordinator Bureau of Land Management 7450 Boston Boulevard Springfield, VA 22153 (703) 440-1713

#### Bureau of Land Management, Jackson District Office

The office supports the International Science and Engineering Fair (ISEF) by providing one judge annually. The purpose is to evaluate and award prizes to participants who are winners of their respective regional and State science fairs and to encourage students to pursue scientific excellence.

Lars Johnson, Geologist 411 Briarwood Drive, Suite 404 Jackson, MS 39206 (601) 977-5424 / Fax: (601) 977-5440

### **Career Oriented Science and Mathematics Integrated Course** (COSMIC)

This three-week summer program is designed to encourage girls in exploring future careers in the fields of science and math. Participants meet women professionals in various fields.

Gail B. Rainey, Physical Oceanographer 1201 Elmwood Park Boulevard New Orleans, LA 70123 (504) 736-2792 / Fax: (504) 736-2610

#### **Gulf Islands National Seashore**

Programs at the seashore focus on environmental education and include nature walks, ranger lectures, and other activities. Teacher guides are also available upon request. For example, the Fourth Grade Activity Guide for Teachers provides 55 curriculum-based activities to introduce students to the cultural and natural resources of the Gulf Islands. Units include Seashore Stewardship; The Sands of Time; The Value of the Salt Marsh; Seashore Celebrities; Water, Water Everywhere; and Crossroads of the Gulf.

Gail Bishop, Mississippi District Interpreter Gulf Islands N.S. 3500 Park Road Ocean Springs, MS 39564 (904) 934-2604

#### Minerals Management Service (MMS) Regional Office

The MMS Regional Office provides a range of educational services. Teacher inservice programs and classroom visitations may include supplemental materials. Availability may be limited, but arrangements may be made for duplication of some materials at minimal cost.

Gulf of Mexico Outer Continental Shelf Region Minerals Management Service Office of Public Affairs 1201 Elmwood Park Boulevard, MS 5000 New Orleans, LA 70123-2394 (504) 736-2595 (800) 200-GULF / Fax: (504) 736-2459

### **Project WILD**

Project WILD offers teacher training and educational materials. Teacher guides, free to teachers who attend the training session, contain more than 80 supplementary, interdisciplinary activities for grades K-12.

Georgia Spencer, Project WILD Coordinator Museum of Natural Science 111 North Jefferson Street Jackson, MS 39202 (601) 354-7303 / Fax: (601) 354-7227

### ▶ Department of Labor (DOL)

### Job Training Partnership Act (JTPA) Liaison

The JTPA Liaison can provide information about the Job Training Partnership Act State and local programs for economically disadvantaged adults and youth.

Jean Denson, Director Mississippi Department of Economic and Community Development **Employment Training Division** 301 West Pearl Street Jackson, MS 39203-3089 (601) 949-2234 / Fax: (601) 949-2291

### Department of Transportation (DOT)

### **Federal Aviation Administration** (FAA) Aviation Education

The FAA Aviation Education Representative coordinates aviation education services, including materials and programs for the FAA in the States assigned to the region.

Programs include the following:

- The Aviation Career Education (ACE) Academy is a one-week summer aviation education program for high school students sponsored by the FAA along with a host educational institution. The program provides students with diverse experiences in aviation career exploration. The focus is on aviation career clusters identified by FAA, with an emphasis on opportunities for women and minorities. A goal is to have one program in each State and U.S. Territory. The FAA will conduct regional leadership workshops and provide funds based on the availability of resources.
- Aviation Education Workshops for Teachers provide teachers with information on FAA aviation programs and materials and prepare them to teach aviation in the classroom. Annual workshops are conducted at colleges and universities across the Nation. The FAA provides information, materials, and speakers for the program.
- National Congress on Aviation and Space Education is sponsored annually by the FAA in partnership with the National Aeronautics and Space Administration and the Civil Air Patrol. The meeting includes teacher workshops and crosstalk sessions to exchange ideas on promoting aerospace education.

George Burnette, ASO-17B.1 FAA Aviation Education Representative 1701 Columbia Avenue College Park, GA 30337 (404) 305-5350 / Fax: (404) 305-5312

#### **FAA Aviation Education Resource** Centers

Located at colleges, museums, and State aviation authority offices, these centers function as information distribution centers for Federal Aviation Administration education materials and resources. The Resource Centers maintain and provide quantities of printed materials, videotapes, and computer educational software. Center personnel can also provide general information, conduct workshops, and make aviation-related presentations.

Mark Rice Aviation Education Resource Center Stringer Aerospace Education Center PO Box 68, Old Highway 15 Stringer, MS 39481 (601) 649-5566



Dr. Harry A. Cooley, Director Aviation Education Resource Center Jackson State University Airway Science Program 1400 Lynch Street Jackson, MS 39217 (601) 968-2471

### ► Environmental Protection Agency (EPA)

#### **EPA Regional Office**

This office takes part in a variety of environmental education programs for both teachers and students. Programs range from teacher workshops and student contests to in-school presentations. Information on environmental issues is also available through the Public Information Center located at the office.

Rich Nawyn, Environmental Education Coordinator Environmental Protection Agency 100 Alabama Street SW Atlanta, GA 30303 (404) 562-8320 / Fax: (404) 562-8335

### The President's Environmental Youth Awards (PEYA) Program

Young people from each State are invited to participate in PEYA, a nationwide program designed to encourage individuals, school classes, summer camps, public interest groups, and youth organizations to promote environmental awareness and community involvement. The two components of the program are the regional certificate program and the National awards competition. Regional certificates, signed by the President, are awarded to each participant by EPA Regional Offices. National individual project winners, or one representative from a National awardwinning group project, along with one sponsor, are honored at EPA headquarters in Washington, DC. Interested K-12 individuals or groups may obtain application materials and contest rules by contacting the EPA Regional Office that serves their State. PEYA has been an ongoing project since it was created by the White House Office of Education and the EPA in 1971.

EPA Region 4 100 Alabama Street SW Atlanta, GA 30303 (404) 562-8314 / Fax: (404) 562-8335

# ► National Aeronautics and Space Administration (NASA)

#### **NASA Educator Resource Center**

The Center has NASA-related educational materials in various formats, including laserdiscs, CD-ROMs, videotapes, slides, audiotapes, publications, and teacher guides. Educators may preview or copy NASA materials upon request.

NASA John C. Stennis Space Center Educator Resource Center Building 1200 Stennis Space Center, MS 39529-6000 (601) 688-3338

#### **NASA** Field Centers

Each field center has an educational programs officer who is responsible for precollege education programs. In addition to administering National programs, the center offers programs and services to meet regional and local needs.

Dr. David Powe, Manager Educational Programs NASA John C. Stennis Space Center Mail Stop MA00 Stennis Space Center, MS 39529-6000 (601) 688-1107

### NASA Regional Educator Resource Center (RERC)

To offer more educators the opportunity to visit the Educator Resource Center Network (ERCN), NASA forms partnerships with planetariums, universities, museums, and other nonprofit organizations to serve as RERCs. Teachers may preview or copy NASA materials upon request.

Tri-State Learning Center NASA Regional Educator Resource Center PO Box 508 Iuka, MS 38852-0508 (601) 423-7455

Mississippi Delta Community College NASA Regional Educator Resource Center PO Box 668 Moorehead, MS 38761 (601) 246-5631, ext. 125

#### **Space Grant Consortium**

The Space Grant Consortium in each State consists of colleges, universities, industry, and other organizations that have an interest in aeronautics and space education. Each consortium receives NASA funds for use in implementing a balanced program of research, education, and public service.

Mississippi Space Grant Consortium 125 Old Chemistry Building University of Mississippi University, MS 38677 (601) 232-7482

### **North Carolina**

### ▶ Department of Agriculture (USDA)

#### 4-H State Leader

The State 4-H Youth Development Programs are administered by the Cooperative Extension Service at land-grant universities. State 4-H leaders coordinate outreach services and training to all county offices.

Dr. Michael A. Davis, Assistant Director Extension State 4-H Leader North Carolina State University PO Box 7606 Raleigh, NC 27695-7606 (919) 515-2801 / Fax: (919) 515-7812 E-mail: mdavis@ncsu.edu

#### Ag in the Classroom State Leader

This program promotes increased understanding of agriculture and possible careers in the agricultural sciences. With National leadership provided by USDA, each State manages its own programs, with assistance from agribusiness, educational institutions, and government.

Janice Shepard North Carolina Farm Bureau PO Box 27766 Raleigh, NC 27611 (919) 782-1705 / Fax: (919) 783-3593

### Youth Enrichment Program

Sponsored by the Agricultural Research Service, this program provides first-hand science experience for more than 100 high school students interested in attending college and pursuing science careers.

Rosanna Taylor, Manager U.S. Department of Agriculture Office of the Administrator Special Programs Room 3552-S 1400 Independence Avenue SW Washington, DC 20250-0301 (202) 720-3511



### ▶ Department of Commerce (DOC)

### Monitor National Marine Sanctuary

Located 16 miles off Cape Hatteras, North Carolina, this Civil War ironclad warship lies in 220 feet of water. The site was designated as a National marine sanctuary in 1975.

Dina Hill, Education Coordinator Monitor National Marine Sanctuary c/o The Mariner's Museum Library 100 Museum Drive Newport News, VA 23606-3798 (804) 599-3122 / Fax: (804) 591-7353

### The National Climatic Data Center

The center publishes meteorological and climatic data that are available to the public for a fee. A catalog listing the products and costs is available.

Jenny Pressley
National Climatic Data Center
National Environmental Satellite, Data, and
Information Service
National Oceanic and Atmospheric
Administration
151 Patton Avenue, Room 120
Asheville, NC 28801-2733
(704) 271-4258 / Fax: (704) 271-4876

### National Sea Grant College Program, Operation Pathfinder

The program consists of two-week summer courses that present an introduction to oceanographic and coastal processes. Courses are available in six regions and are designed to enhance skills in science teaching.

Bill Hall Delaware Sea Grant 700 Pilottown Road Lewes, DE 19958 (302) 645-4253 / Fax: (302) 645-4007

### North Carolina National Estuarine Research Reserve

The reserve offers educational services for school groups, interpretive services, and educational curriculum development. A field guide is available.

Susan Lovelace, Education Coordinator North Carolina National Estuarine Research Reserve North Carolina Division of Coastal Management PO Drawer 1040 Beaufort, NC 28516 (919) 728-2170 / Fax: (919) 728-6273

### ▶ Department of Education (ED)

## Eisenhower Consortium for Mathematics and Science Education at SERVE

The Eisenhower Regional Consortium provides information and technical assistance to help States and school districts improve mathematics and science education.

Francena Cummings, Director
Eisenhower Consortium for Mathematics and
Science Education at SERVE
345 South Magnolia Drive, Suite D-23
Tallahassee, FL 32301-2950
(800) 854-0476
(904) 671-6033 / Fax: (904) 671-6010
WWW: http://www.serve.org/Eisenhower

#### **Eisenhower State Coordinators**

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Dr. Linda G. Love
Eisenhower Professional Development
Program
North Carolina Department of Public
Instruction
301 North Willmington
Raleigh, NC 27601-2825
(919) 715-1363 / Fax: (919) 715-0517

### **Eisenhower State Coordinators** for Higher Education

Eisenhower State Coordinators oversee the Eisenhower Professional Development State Formula Grants for the State Agency for Higher Education (SAHE). The program focuses on teacher enhancement through both inservice and preservice programs.

Elizabeth A. French
Eisenhower Mathematics and Science
Program
134 1/2 East Franklin Street, CB #3345
UNC—Mathematics and Science Education
Network
Chapel Hill, NC 27599-3345
(919) 966-3256 / Fax: (919) 962-1316

# Southeast and Islands Regional Technology in Education Consortium (SEIR\*TEC)

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WWW: http://www.serve.org/seir-tec/

Deborah Williams, R\*TEC Project Officer U.S. Department of Education, OERI ORAD/SLSD, Room 504f 555 New Jersey Avenue NW Washington, DC 20208-5644 (202) 219-2204 E-mail: Deborah\_Williams@ed.gov

### SouthEastern Regional Vision for Education (SERVE)

SERVE identifies effective teaching techniques and school improvement efforts within the region and shares this information with State and local educators.

Roy H. Forbes, Executive Director SERVE PO Box 5367 Greensboro, NC 27435 (800) 755-3277 (910) 334-3211 / Fax: (910) 334-3268 WWW: http://serve.org/

### ► Department of Energy (DOE)

### Appalachian Regional Commission (ARC) and Oak Ridge National Laboratory (ORNL)

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Terry L. Lashley, Education Partnerships Team Leader Oak Ridge National Laboratory Office of University and Science Education PO Box 2008 5500A, MS 6366 Oak Ridge, TN 37831-6366 (423) 574-0689 / Fax: (423) 241-6726 E-mail: TL7@ornl.gov

### ▶ Department of Health and **Human Services**

### National Institute of **Environmental Health Sciences**

The institute supports life sciences education programs.

National Institute of Environmental Health Sciences National Institutes of Health Office of Institutional Development Mail Drop B2-09 PO Box 12233 Research Triangle Park, NC 27709 (919) 541-4265

### ▶Department of the Interior (DOI)

#### **Albermarle-Pamlico Watershed**

Environmental educational materials focusing on the watershed are distributed through teacher workshops, environmental education

conferences, festivals, and upon request. These materials cover topics relating to water quality and natural resources in North Carolina's Albermarle and Pamlico Sounds and their watersheds.

John Ellis, Fish and Wildlife Biologist Raleigh Ecological Services PO Box 33726 Raleigh, NC 27636-3726 (919) 856-4520, ext. 26 / Fax: (919) 856-4556

#### **Bureau of Land Management Eastern States Office**

This office provides information about educational programs, materials, and local landmanagement issues.

**Education Coordinator** Bureau of Land Management 7450 Boston Boulevard Springfield, VA 22153 (703) 440-1713

#### Cape Hatteras National Seashore

Environmental education programs are available for fourth grade students at the seashore. Guided tours and lectures are offered to all grade levels.

Division of Interpretation Cape Hatteras National Seashore Route 1, Box 675 Manteo, NC 27954 (919) 473-2111

### Minerals Management Service (MMS) Regional Office

The MMS Regional Office provides a range of educational services. Teacher inservice programs and classroom visitations may include supplemental materials. Availability may be limited, but arrangements may be made for duplication of some materials at minimal cost.

Office of Communications & Governmental Affairs

Education Coordinator Minerals Management Service 1849 C Street NW, LMS4230 Washington, DC 20240-0001 (202) 208-3985 / Fax: (202) 208-3968

Offshore Minerals Management Technical Communications Service Minerals Management Service 381 Eldon Street, MS 4530 Herndon, VA 20170-4817 (703) 787-1080 / Fax: (703) 787-1186

#### **Project WILD**

Project WILD offers teacher training and educational materials. Teacher guides, free to teachers who attend the training session, contain more than 80 supplementary, interdisciplinary activities for grades K-12.

Celeste Wescott, Project WILD Coordinator North Carolina Wildlife Resources Commission 512 North Salisbury Street Raleigh, NC 27611 (919) 733-7123 / Fax: (919) 733-7083

#### Wright Brothers National **Monument**

In Pharm-A-Sea, students are introduced to the concept of biological diversity through a salt marsh slog-walk, where they collect marine plant and animal species and learn of their medicinal uses.

Robert Woody, Chief of Interpretation Cape Hatteras Group, Wright Brothers NM Route #1, PO Box 675 Manteo, NC 27954 (919) 473-2111, ext. 112 Fax: (919) 473-2595

### ► Department of Labor (DOL)

### Job Training Partnership Act (JTPA) Liaison

The JTPA Liaison can provide information about the Job Training Partnership Act State and local programs for economically disadvantaged adults and youth.

Joel C. New, Director Division of Employment and Training North Carolina Department of Commerce 111 Seaboard Avenue Raleigh, NC 27604 (919) 733-6383 / Fax: (919) 733-6923

### **▶Department of** Transportation (DOT)

### Federal Aviation Administration (FAA) Aviation Education

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Programs include the following:

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George Burnette, ASO-17B.1, FAA Aviation Education Representative 1701 Columbia Avenue College Park, GA 30337 (404) 305-5350 / Fax: (404) 305-5312

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Helen Caldwell Elizabeth Aviation High School 1704 Weeksville Road Elizabeth City, NC 40212 (919) 335-3291

Warren Wren Wright Brothers National Memorial US 158 Bypass Kill Devil Hills, NC 27948 (919) 441-7430

### ► Environmental Protection Agency (EPA)

#### **EPA** Regional Office

This office takes part in a variety of environ-

mental education programs for both teachers and students. Programs range from teacher workshops and student contests to in-school presentations. Information on environmental issues is also available through the Public Information Center located at the office.

Rich Nawyn, Environmental Education Coordinator Environmental Protection Agency 100 Alabama Street SW Atlanta, GA 30303 (404) 562-8320 / Fax: (404) 562-8335

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EPA Region 4 100 Alabama Street SW Atlanta, GA 30303 (404) 562-8314 / Fax: (404) 562-8335

# ► National Aeronautics and Space Administration (NASA)

#### **NASA Educator Resource Center**

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Virginia Air and Space Center NASA Educator Resource Center 600 Settler's Landing Road Hampton, VA 23669-4033 (804) 727-0900, ext. 757

#### **NASA Field Centers**

Each field center has an educational programs officer who is responsible for precollege education programs. In addition to administering National programs, the center offers programs and services to meet regional and local needs.

Marchelle Canright, Center Education Program Officer NASA Langley Research Center, MS 400 Hampton, VA 23681-0001 (804) 864-3313

### NASA Regional Educator Resource Center (RERC)

To offer more educators the opportunity to visit the Educator Resource Center Network (ERCN), NASA forms partnerships with planetariums, universities, museums, and other nonprofit organizations to serve as RERCs. Teachers may preview or copy NASA materials upon request.

University of North Carolina at Charlotte NASA Regional Educator Resource Center J. Murrey Atkins Library Charlotte, NC 28223 (704) 547-2559

#### **Space Grant Consortium**

The Space Grant Consortium in each State consists of colleges, universities, industry, and other organizations that have an interest in aeronautics and space education. Each consortium receives NASA funds for use in implementing a balanced program of research, education, and public service.

North Carolina Space Grant Consortium North Carolina State University Campus Box 7515 Raleigh, NC 27695-7515 (919) 515-5939

### South Carolina

### ▶ Department of Agriculture (USDA)

#### 4-H State Leader

The State 4-H Youth Development Programs are administered by the Cooperative Extension Service at land-grant universities. State 4-H leaders coordinate outreach services and training to all county offices.



Dr. Diane G. Smathers, Assistant Director 4-H Youth Development 243 Poole Agricultural Center PO Box 340315 Clemson, SC 29634-0315 (864) 656-2414 / Fax: (864) 656-5723 E-mail: dsmthrs@clemson.edu

### Ag in the Classroom State Leader

This program promotes increased understanding of agriculture and possible careers in the agricultural sciences. With National leadership provided by USDA, each State manages its own programs, with assistance from agribusiness, educational institutions, and government.

Robbie Myers South Carolina Ag in the Classroom 4913 College Lake Drive Florence, SC 29506 (803) 796-6700

### ► Department of Commerce (DOC)

### ACE Basin National Estuarine Research Reserve

The reserve offers teacher workshops, a coastal cruise on a research vessel, and guided nature walks. Reservations are required.

Whit McMillan, Education Coordinator ACE Basin National Estuarine Research Reserve South Carolina Wildlife and Marine Resources Department PO Box 12559 Charleston, SC 29412 (803) 762-5437 or 5007 Fax: (803) 762-5001

### National Sea Grant College Program, Operation Pathfinder

The program consists of two-week summer courses that present an introduction to oceanographic and coastal processes. Courses are available in six regions and are designed to enhance skills in science teaching.

Sharon Walker Mississippi-Alabama Sea Grant Consortium and Gulf Coast Research Laboratory PO Box 7000 Ocean Springs, MS 39566-7000 (601) 374-5550 / Fax: (601) 374-5559

### North Inlet/Winyah Bay National Estuarine Research Reserve

Summer coastal ecology courses for grades K-5 and workshops for teachers are available. Reservations are required.

Wendy Allen, Education Coordinator North Inlet/Winyah Bay National Estuarine Research Reserve Baruch Marine Field Laboratory PO Box 1630 Georgetown, SC 29442 (803) 546-6219 / Fax: (803) 546-1632

### ► Department of Education (ED)

# Eisenhower Consortium for Mathematics and Science Education at SERVE

The Eisenhower Regional Consortium provides information and technical assistance to help States and school districts improve mathematics and science education.

Francena Cummings, Director
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345 South Magnolia Drive, Suite D-23
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#### **Eisenhower State Coordinators**

Eisenhower State Coordinators administer the Eisenhower Professional Development Program State Formula grants. The program focuses on sustained and intensive high-quality professional development through inservice programs.

Tanzella Gaither Eisenhower Professional Development Program 703 Rutledge Building, 1429 Senate Columbia, SC 29201 (803) 734-8312 / Fax: (803) 734-5953

### **Eisenhower State Coordinators** for Higher Education

Eisenhower State Coordinators oversee the Eisenhower Professional Development State Formula Grants for the State Agency for Higher Education (SAHE). The program focuses on teacher enhancement through both inservice and preservice programs.

Nancy Healy-Williams, Academic Program Coordinator Eisenhower Professional Development Program South Carolina Commission on Higher Education 1333 Main Street, Suite 200 Columbia, SC 29201

(803) 737-2246 / Fax: (803) 253-2297

Dr. Gail Morrison, Associate Commissioner for Academic Affairs South Carolina Commission on Higher Education 1333 Main Street, Suite 300 Columbia, SC 29201 (803) 737-2243 / Fax: (803) 737-2297

# Southeast and Islands Regional Technology in Education Consortium (SEIR\*TEC)

ED established the Regional Technology in Education Consortia (R\*TEC) program in the fall of 1995 to help States, districts, schools, adult literacy centers, and other educational institutions use advanced technology to support improved teaching and student achievement. R\*TEC's role in educational technology is unique in two ways: the emphasis is regional and the primary goal is to ensure that technology is used effectively to support school reform. Program strategies include professional development, technical assistance, and information dissemination.

Don Holznagel, Director, SEIR\*TEC 41 Marietta Street NW, Suite 1000 Atlanta, GA 30303 (800) 659-3204 (404) 893-0100 / Fax: (404) 577-7812 E-mail: dholznag@serve.org
WWW: http://www.serve.org/seir-tec/

Deborah Williams, R\*TEC Project Officer U.S. Department of Education, OERI ORAD/SLSD, Room 504f 555 New Jersey Avenue NW Washington, DC 20208-5644 (202) 219-2204 E-mail: Deborah\_Williams@ed.gov

### SouthEastern Regional Vision for Education (SERVE)

SERVE identifies effective teaching techniques and school improvement efforts within the region and shares this information with State and local educators.

Roy H. Forbes, Executive Director SERVE PO Box 5367 Greensboro, NC 27435 (800) 755-3277 (910) 334-3211 / Fax: (910) 334-3268 WWW: http://www.serve.org/

SERVE, South Carolina 1008 Rutledge Building 1429 Senate Street Columbia, SC 29201 (803) 734-4110 / Fax: (803) 734-3389



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### ► Department of Energy (DOE)

### Appalachian Regional Commission (ARC) and Oak Ridge National Laboratory (ORNL)

A summer science, mathematics, and technology Teacher Leadership Institute is available for secondary teachers to participate in research-based programs at ORNL. The institute is provided in a two-week summer residential format patterned after the ORNL/National Science Foundation (NSF) National Teacher Enhancement Project and Leadership Institute. Participants are selected by the ARC from secondary schools throughout the ARC region. The focus is on handson laboratory research applying the tools and methods used in ongoing ORNL projects in research areas (as appropriate for each teacher's teaching assignment), pedagogy, and leadership. The program will feature telecommunications instruction at the ORNL Regional Science Center and telecommunications will be the primary method used for academic year follow-up and continued interactions with the teachers. Participants in the Teacher Leadership Institute will be hosted by several ORNL research divisions based on each teacher's background and interests. A program coordinator with experience in teacher preparation/higher education delivers instruction in pedagogy and educational leadership.

ARC and ORNL also collaborate on a summer science, mathematics, and technology Summer Science Honors Academy for ARC students to participate in research-based programs at ORNL. Student participants (seniors or graduating seniors) will be selected from secondary schools throughout the ARC region. Students will be teamed with research mentors to participate in hands-on laboratory research applying the tools and methods used in ongoing ORNL projects. Students will also receive telecommunications instruction at the ORNL Regional Science Center.

Terry L. Lashley, Education Partnerships Team Leader Oak Ridge National Laboratory Office of University and Science Education PO Box 2008 5500A, MS 6366 Oak Ridge, TN 37831-6366 (423) 574-0689 / Fax: (423) 241-6726 E-mail: TL7@ornl.gov

### Savannah River Ecology Laboratory (SREL)

SREL offers outstanding short- and long-term educational and research opportunities in

ecology and environmental sciences for undergraduate and graduate students and university faculty. The lab also participates in the DOE-sponsored Teacher Research Associates (TRAC) program.

Savannah River Ecology Laboratory Environmental Outreach and Education Division Program Office, Drawer E Aiken, SC 29802 (803) 725-9726 / Fax: (803) 725-3309

J Vaun McArthur

### Savannah River Site (SRS)

E-mail: mcarthur@srel.edu

Tours of SRS are available to groups who wish to obtain educational knowledge or general information about the site. High school groups and college or university organizations may request an invitation to tour.

WSRC Visitors Program Community Relations Department Building 705-A Aiken, SC 29803 (803) 725-0191

### ► Department of the Interior (DOI)

### **Bureau of Land Management Eastern States Office**

This office provides information about educational programs, materials, and local land-management issues.

Education Coordinator Bureau of Land Management 7450 Boston Boulevard Springfield, VA 22153 (703) 440-1713

### Carolina Sandhills National Wildlife Refuge

Both in-school presentations and guided field trips at the refuge can be arranged upon request.

Carolina Sandhills National Wildlife Refuge Route 2, Box 330 McBee, SC 29101 (803) 335-8401 / Fax: (803) 335-8406

### Congaree Swamp National Monument

Spring and fall environmental programs are offered for students at the monument, while summer workshops are available for teachers. Guided walks are also available.

Division of Interpretation Congaree Swamp National Monument 200 Caroline Simms Road Hopkins, SC 20961 (803) 776-4396

### Minerals Management Service (MMS) Regional Office

The MMS Regional Office provides a range of educational services. Teacher inservice programs and classroom visitations may include supplemental materials. Availability may be limited, but arrangements may be made for duplication of some materials at minimal cost.

Office of Communications & Governmental Affairs

Education Coordinator Minerals Management Service 1849 C Street NW, LMS4230 Washington, DC 20240-0001 (202) 208-3985 / Fax: (202) 208-3968

Offshore Minerals Management Technical Communications Service Minerals Management Service 381 Eldon Street, MS 4530 Herndon, VA 20170-4817 (703) 787-1080 / Fax: (703) 787-1186

#### **Project WILD**

Project WILD offers teacher training and educational materials. Teacher guides, free to teachers who attend the training session, contain more than 80 supplementary, interdisciplinary activities for grades K–12.

Don Winslow, Project WILD Coordinator South Carolina Wildlife and Marine Resources 1000 Assembly, PO Box 167 Columbia, SC 29202 (803) 734-3888 / Fax: (803) 734-3951

### ► Department of Labor (DOL)

### Job Training Partnership Act (JTPA) Liaison

The JTPA Liaison can provide information about the Job Training Partnership Act State and local programs for economically disadvantaged adults and youth.

Dr. Robert E. David, Executive Director South Carolina Employment Security Commission PO Box 995 Columbia, SC 29202 (803) 737-2617 / Fax: (803) 737-2642



### ► Department of Transportation (DOT)

### Federal Aviation Administration (FAA) Aviation Education

The FAA Aviation Education Representative coordinates aviation education services, including materials and programs for the FAA in the States assigned to the region.

Programs include the following:

- ▶ The Aviation Career Education (ACE)
  Academy is a one-week summer aviation
  education program for high school students sponsored by the FAA along with a
  host educational institution. The program
  provides students with diverse experiences
  in aviation career exploration. The focus
  is on aviation career clusters identified by
  FAA, with an emphasis on opportunities
  for women and minorities. A goal is to
  have one program in each State and U.S.
  Territory. The FAA will conduct regional
  leadership workshops and provide funds
  based on the availability of resources.
- ▶ Aviation Education Workshops for Teachers provide teachers with information on FAA aviation programs and materials and prepare them to teach aviation in the classroom. Annual workshops are conducted at colleges and universities across the Nation. The FAA provides information, materials, and speakers for the program.
- ▶ National Congress on Aviation and Space Education is sponsored annually by the FAA in partnership with the National Aeronautics and Space Administration and the Civil Air Patrol. The meeting includes teacher workshops and crosstalk sessions to exchange ideas on promoting aerospace education.

George Burnette, ASO-17B.1, FAA Aviation Education Representative 1701 Columbia Avenue College Park, GA 30337 (404) 305-5350 / Fax: (404) 305-5312

### FAA Aviation Education Resource Centers

Located at colleges, museums, and State aviation authority offices, these centers function as information distribution centers for Federal Aviation Administration education materials and resources. The Resource Centers maintain and provide quantities of printed materials, videotapes, and computer educational software. Center personnel can also provide general information, conduct workshops, and make aviation-related presentations.

Parnell Smith, Dean Clinton Junior College PO Box 968 Rock Hill, SC 29731 (803) 327-7402

### ► Environmental Protection Agency (EPA)

#### **EPA Regional Office**

This office takes part in a variety of environmental education programs for both teachers and students. Programs range from teacher workshops and student contests to in-school presentations. Information on environmental issues is also available through the Public Information Center located at the office.

Rich Nawyn, Environmental Education Coordinator Environmental Protection Agency 100 Alabama Street SW Atlanta, GA 30303 (404) 562-8320 / Fax: (404) 562-8335

### The President's Environmental Youth Awards (PEYA) Program

Young people from each State are invited to participate in PEYA, a nationwide program designed to encourage individuals, school classes, summer camps, public interest groups, and youth organizations to promote environmental awareness and community involvement. The two components of the program are the regional certificate program and the National awards competition. Regional certificates, signed by the President, are awarded to each participant by EPA Regional Offices. National individual project winners, or one representative from a National awardwinning group project, along with one sponsor, are honored at EPA headquarters in Washington, DC. Interested K-12 individuals or groups may obtain application materials and contest rules by contacting the EPA Regional Office that serves their State. PEYA has been an ongoing project since it was created by the White House Office of Education and the EPA in 1971.

EPA Region 4 100 Alabama Street SW Atlanta, GA 30303 (404) 562-8314 / Fax: (404) 562-8335

# ► National Aeronautics and Space Administration (NASA)

#### **NASA Educator Resource Center**

The Center has NASA-related educational materials in various formats, including laserdiscs, CD-ROMs, videotapes, slides, audiotapes, publications, and teacher guides. Educators may preview or copy NASA materials upon request.

Virginia Air and Space Center NASA Educator Resource Center 600 Settler's Landing Road Hampton, VA 23669-4033 (804) 727-0900, ext. 757

#### **NASA Field Centers**

Each field center has an educational programs officer who is responsible for precollege education programs. In addition to administering National programs, the center offers programs and services to meet regional and local needs.

Marchelle Canright, Center Education Program Officer NASA Langley Research Center, MS 400 Hampton, VA 23681-0001 (804) 864-3313

### NASA Regional Educator Resource Center (RERC)

To offer more educators the opportunity to visit the Educator Resource Center Network (ERCN), NASA forms partnerships with planetariums, universities, museums, and other nonprofit organizations to serve as RERCs. Teachers may preview or copy NASA materials upon request.

Stanback Planetarium NASA Regional Educator Resource Center South Carolina State University PO Box 7636 Orangeburg, SC 29117-7636 (803) 536-8709/7174/8119

#### **Space Grant Consortium**

The Space Grant Consortium in each State consists of colleges, universities, industry, and other organizations that have an interest in aeronautics and space education. Each consortium receives NASA funds for use in implementing a balanced program of research, education, and public service.

South Carolina Space Grant Consortium Department of Geology 58 Coming Street Charleston, SC 29424 (803) 953-5463



### ► National Science Foundation (NSF)

### Statewide Systemic Initiatives (SSI) Program

South Carolina's SSI Program uses regional centers to achieve systemic reform. These centers develop teacher leaders and expand their expertise in instructional strategies, assessment, and community outreach projects. This initiative is supported by changes in policy, certification standards for both teachers and administrators, school regulations and accountability, and the development of State science and mathematics curriculum frameworks.

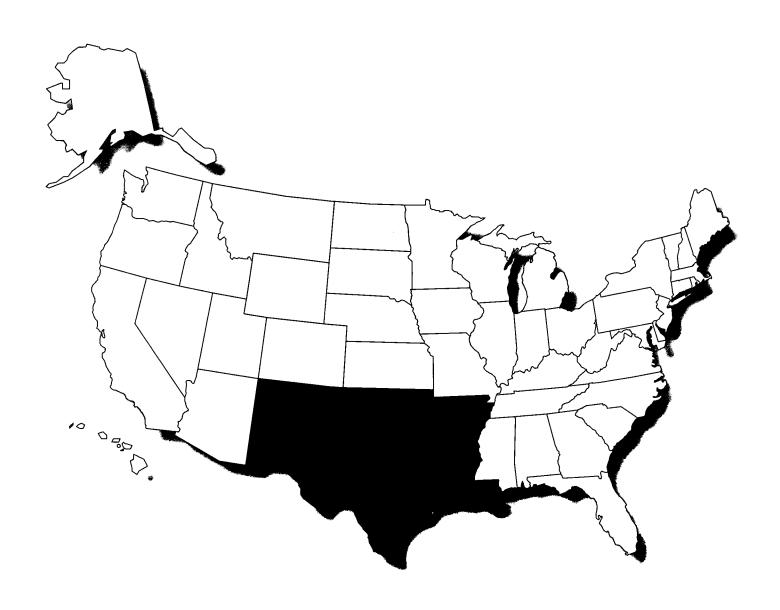
Dennis Bartels 1429 Senate Street Rutledge Building, Room 703 Columbia, SC 29201 (803) 734-8277 / Fax: (803) 734-8624



- ► Arkansas
- **▶** Louisiana
- **▶** New Mexico
- **▶** Oklahoma
- **▶** Texas



Eisenhower Southwest Consortium for the Improvement of Mathematics and Science Teaching





# Eisenhower Southwest Consortium for the Improvement of Mathematics and Science Teaching



he Eisenhower Southwest Consortium for the Improvement of Mathematics and Science Teaching (SCIMAST) is one of the 10 Eisenhower Mathematics and Science Regional Consortia established by the U.S. Department of Education. The National Network of Eisenhower Regional Consortia and the Eisenhower National Clearinghouse for Mathematics and Science Education form a coordinated, field-based National infrastructure to promote systemic educational reform. The Consortium supports systemic educational reform in its region, with objectives to support regional, State, and local reform initiatives and to fill gaps in knowledge and service. These efforts help educators:

- ▶ Develop statewide visions of a system of mathematics and science education that provides equal access to all students and reflects emerging world-class standards.
- ▶ Develop State policies and systems to guide the implementation of that vision.
- Implement professional development approaches that model effective teaching and provide sustained support.
- ▶ Identify, adapt, and use instructional materials, methods, and assessment tools to implement new visions of mathematics and science education.

Since the fall of 1992, SCIMAST has been funded through grants from the U.S. Department of Education's Eisenhower National Program for Mathematics and Science Education. This year's Federal funds for SCIMAST total \$1,470,000, representing 80 percent of the project's costs. An additional \$367,500 is provided by non-Federal sources, making up the final 20 percent of project costs. SCIMAST is operated by the Southwest Educational Development Laboratory, which has provided educational services to the Southwestern region since 1966.

#### **Activities**

Consortium activities are grounded in the belief that "systemic reform" requires support for change at all levels of the educational system, and that educators at all levels must participate in setting the direction for change. If any single group is most critical in transforming educational practice, it is teachers. They need an active voice in the reform movement; they also need strong programs of professional development and support. Teachers often teach in the ways they have been taught, not in the ways they have been educated to teach; therefore, teacher training needs to effectively model the instructional approaches that teachers are expected to use in the classroom.

Consortium activities also reflect the belief that equity must be a priority in the reform and redesign of math and science education. No country can maintain world-class status if half or more of its students are disenfranchised from the system. Moreover, "equal access" means much more than simply the freedom to walk in the door of a classroom or enroll in a course—it includes access to ideas and resources. Instructional content and strategies, then, must be geared to the context, interests, and needs of every student, not merely those for whom the math and science pipeline has traditionally been structured.

SCIMAST's organizational structures and activities are designed to be as inclusive as possible, promoting open communication and collaboration among a broad spectrum of participants. The 15-member Consortium Advisory Board includes representatives from all levels of educational policy and practice and reflects the Southwestern region's cultural and ethnic diversities. Regional forums and other Consortium-sponsored meetings are open to all constituencies. Service activities also are targeted to a wide range of practitioners and policymakers.

#### **Services**

The Consortium offers services to educators at all levels, including State and local policy-makers; teacher trainers and professional development staff; and local administrators, supervisors, and teachers. Networking activities include regional forums that focus on reform issues and concerns, as well as Statelevel meetings that facilitate consensus regarding standards and policies. Technical assistance is provided to States to support development and implementation of statewide visions, goals, standards, frameworks, curricula, materials, assessments, and

instructional practices. Schools also receive technical assistance to identify, select, and implement quality programs, materials, and assessment activities.

Professional development activities are available in the form of work sessions for policy-makers and teacher trainers to increase their awareness and proficiency in using effective, student-centered staff development approaches. Professional development awards are available to support and strengthen local programs at both preservice and inservice levels. The Consortium also provides intensive long-term professional development and follow-up support for teachers, providing up-to-date content and modeling effective teaching practices.

The Consortium identifies regional resources, including materials, instructional methods, and assessment tools, appropriate for dissemination via the Eisenhower National Clearinghouse (ENC). It also provides dissemination of information about reform issues, regional resources, SCIMAST services, and the services and information available through ENC.

Stephen Marble,

Director

Sharon Adams, Information Services Associate

Wanda Guzman, Senior Training Associate

Dawn McArdle, Administrative Secretary

Veronica Mendoza, Administrative Secretary

Mary Jo Powell Technical Writing Associate

Barbara Salyer, Senior Training Associate

Kathy Schmidt, Evaluation Associate

Lori Snider, Administrative Assistant

Maria Torres, Senior Training Associate



#### **Associated Staff:**

Margaret Bolick,

Senior Training Associate

Glenda Clark.

Senior Training Associate

Sandra Finley,

Senior Training Associate

Chris Ferguson,

Senior Training Associate

Southwest Consortium for the Improvement of Mathematics and Science Teaching 211 East Seventh Street Austin, TX 78701 (512) 476-6861 / Fax: (512) 476-2286

(512) 476-6861 / Fax: (512) 476-2286 E-mail: scimast@sedl.org

WWW: http://www.sedl.org/sedl/

scimast.html

### **Arkansas**

### ▶ Department of Agriculture (USDA)

#### 4-H State Leader

The State 4-H Youth Development Programs are administered by the Cooperative Extension Service at land-grant universities. State 4-H leaders coordinate outreach services and training to all county offices.

Dr. Frank T. Plafcan, 4-H State Leader 2301 University Avenue, PO Box 391 University of Arkansas Little Rock, AR 72203 (501) 671-2059 / Fax: (501) 671-2251 E-mail: fplafcan@uaex.edu

#### Ag in the Classroom State Leader

This program promotes increased understanding of agriculture and possible careers in the agricultural sciences. With National leadership provided by USDA, each State manages its own programs, with assistance from agribusiness, educational institutions, and government.

Dr. Larry R. Dale ASU Center for Economic Education PO Box 2890 University of Arkansas State University, AR 72467-2890 (501) 972-3810 / Fax: (501) 972-3810

### ▶ Department of Education (ED)

#### **Eisenhower State Coordinators**

Eisenhower State Coordinators administer the Eisenhower Professional Development Program State Formula grants. The program focuses on sustained and intensive high-quality professional development through inservice programs.

Dr. Charles Watson
Eisenhower Professional Development
Program

Arkansas Department of Education Four State Capitol Mall, Room 107-A Little Rock, AR 72201 (501) 682-4474 / Fax: (501) 682-4886

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### **Eisenhower State Coordinators** for Higher Education

Eisenhower State Coordinators oversee the Eisenhower Professional Development State Formula Grants for the State Agency for Higher Education (SAHE). The program focuses on teacher enhancement through both inservice and preservice programs.

Suzanne Mitchell Eisenhower Professional Development Program

Arkansas Department of Higher Education 114 East Capitol Avenue Little Rock, AR 72201-1904 (501) 324-9300 / Fax: (501) 324-9308

# Southeast and Islands Regional Technology in Education Consortium (SEIR\*TEC)

ED established the Regional Technology in Education Consortia (R\*TEC) program in the fall of 1995 to help States, districts, schools, adult literacy centers, and other educational institutions use advanced technology to support improved teaching and student achievement. R\*TEC's role in educational technology is unique in two ways: the emphasis is regional and the primary goal is to ensure that technology is used effectively to support school reform. Program strategies include professional development, technical assistance, and information dissemination.

Don Holznagel, Director SEIR\*TEC 41 Marietta Street NW, Suite 1000 Atlanta, GA 30303 (800) 659-3204 (404) 893-0100 / Fax: (404) 577-7812 E-mail: dholznag@serve.org WWW: http://www.serve.org/seir-tec/ Deborah Williams, R\*TEC Project Officer U.S. Department of Education Office of Educational Research and Improvement ORAD/SLSD, Room 504f 555 New Jersey Avenue NW Washington, DC 20208-5644 (202) 219-2204 E-mail: Deborah\_Williams@ed.gov

### Southwest Consortium for the Improvement of Mathematics and Science Teaching (SCIMAST)

The Eisenhower Regional Consortium provides information and technical assistance to help States and school districts improve mathematics and science education.

Stephen Marble, Director SCIMAST 211 East Seventh Street Austin, TX 78701 (512) 476-6861 / Fax: (512) 476-2286 WWW: http://www.sedl.org/sedl/ scimast.html

### Southwest Educational Development Laboratory (SEDL)

SEDL identifies effective teaching techniques and school improvement efforts within the region and shares this information with State and local educators.

Wesley A. Hoover, Executive Director SEDL 211 East Seventh Street Austin, TX 78701 (512) 476-6861 / Fax: (512) 476-2286 WWW: http://www.sedl.org

### ► Department of the Interior (DOI)

### Arkansas Post National Memorial

The memorial offers guided nature walks and lectures that focus on archeology, biology, water conservation and ecology, and anthropology.

Division of Interpretation Arkansas Post National Memorial Route 1, Box 16 Gillett, AR 72055 (501) 548-2432

#### **Buffalo National River**

Nuts About Nature is a teacher workshop given through the Ozark Unlimited Resources Cooperative to teachers from 21 school districts in and around Harrison, Arkansas. Practical demonstrations on environmental concepts are offered to help teachers in these



rural areas learn more about the Buffalo National River.

In the Arkansas Water Education Team (WET) program, students are taught to monitor water quality using EPA-approved techniques. Schools are provided with equipment and supplies needed to monitor a stream near their school. Lead agency representatives work closely with schools to guide them through ongoing data collection and analysis. The program includes physical, chemical, and biological components.

Douglas Wilson, Chief Park Interpreter Buffalo National River PO Box 1173 Harrison, AR 72602-1173 (501) 741-5443 / Fax: (501) 741-7286

### **Bureau of Land Management Eastern States Office**

This office provides information about educational programs, materials, and local landmanagement issues.

Education Coordinator Bureau of Land Management 7450 Boston Boulevard Springfield, VA 22153 (703) 440-1713

#### Hot Springs National Park

The program How Hot is the Water? lets student groups measure the temperature of the hot springs using Fahrenheit and Celsius thermometers. Class results are then averaged.

Gail Sears, Park Ranger—Interpretation Hot Springs National Park PO Box 1860 Hot Springs, AR 71902 (501) 623-1433, ext. 656 Fax: (505) 624-1536

#### **Project WILD**

Project WILD offers teacher training and educational materials. Teacher guides, free to teachers who attend the training session, contain more than 80 supplementary, interdisciplinary activities for grades K-12.

Pat Knighten, Project WILD Coordinator Arkansas Game and Fish Commission 2 Natural Resources Drive Little Rock, AR 72205 (501) 223-6405 / Fax: (501) 233-6447

### ▶ Department of Labor (DOL)

### Job Training Partnership Act (JTPA) Liaison

The JTPA Liaison can provide information

about the Job Training Partnership Act State and local programs for economically disadvantaged adults and youth.

Sharon Robinette Administrator Employment and Training Division Arkansas Employment Security Division 2 Capitol Mall, Room 303 Little Rock, AR 72203 (501) 682-1684 / Fax: (501) 682-1344

### **▶** Department of Transportation (DOT)

### **Federal Aviation Administration** (FAA) Aviation Education

The FAA Aviation Education Representative coordinates aviation education services, including materials and programs for the FAA in the States assigned to the region.

Programs include the following:

- The Aviation Career Education (ACE) Academy is a one-week summer aviation education program for high school students sponsored by the FAA along with a host educational institution. The program provides students with diverse experiences in aviation career exploration. The focus is on aviation career clusters identified by FAA, with an emphasis on opportunities for women and minorities. A goal is to have one program in each State and U.S. Territory. The FAA will conduct regional leadership workshops and provide funds based on the availability of resources.
- Aviation Education Workshops for Teachers provide teachers with information on FAA aviation programs and materials and prepare them to teach aviation in the classroom. Annual workshops are conducted at colleges and universities across the Nation. The FAA provides information, materials, and speakers for the pro-
- National Congress on Aviation and Space Education is sponsored annually by the FAA in partnership with the National Aeronautics and Space Administration and the Civil Air Patrol. The meeting includes teacher workshops and crosstalk sessions to exchange ideas on promoting aerospace education.

Debra Myers, ASW-18B, FAA Aviation Education Representative 2601 Meacham Boulevard Fort Worth, TX 76193 (817) 222-5833 / Fax: (817) 222-5950

### **FAA Aviation Education Resource**

Located at colleges, museums, and State aviation authority offices, these centers function as information distribution centers for Federal Aviation Administration education materials and resources. The Resource Centers maintain and provide quantities of printed materials, videotapes, and computer educational software. Center personnel can also provide general information, conduct workshops, and make aviation-related presentations.

Louis Midkiff Aviation Education Resource Center Crowley's Ridge Education Service Cooperative PO Box 377 Harrisburg, AR 72432 (501) 578-5426

Catherine Johnson Aerospace Education Center PO Box 7332 425 West Capital Avenue Suite 3280 Little Rock, AR 72201 (503) 371-0331

### **▶** Environmental Protection Agency (EPA)

#### **EPA** Regional Office

This office takes part in a variety of environmental education programs for both teachers and students. Programs range from teacher workshops and student contests to in-school presentations. Information on environmental issues is also available through the Public Information Center located at the office.

Jo Taylor, Environmental Education Coordinator Environmental Protection Agency 1445 Ross Avenue (6X) Dallas, TX 75202 (214) 655-2204 / Fax: (214) 655-2118

### The President's Environmental Youth Awards (PEYA) Program

Young people from each State are invited to participate in PEYA, a nationwide program designed to encourage individuals, school classes, summer camps, public interest groups, and youth organizations to promote environmental awareness and community involvement. The two components of the program are the regional certificate program and the National awards competition. Regional certificates, signed by the President, are awarded to each participant by EPA Regional Offices. National individual project winners,



or one representative from a National award-winning group project, along with one sponsor, are honored at EPA headquarters, Washington, DC. Interested K-12 individuals or groups may obtain application materials and contest rules by contacting the EPA Regional Office that serves their State. PEYA has been an ongoing project since it was created by the White House Office of Education and the EPA in 1971.

EPA Region 6 1445 Ross Avenue Dallas, TX 75202-2733 (214) 655-2204 / Fax: (214) 655-2118

### ► National Aeronautics and Space Administration (NASA)

#### **NASA Educator Resource Center**

The center has NASA-related educational materials in various formats, including laserdiscs, CD-ROMs, videotapes, slides, audiotapes, publications, and teacher guides. Educators may preview or copy NASA materials upon request.

U.S. Space and Rocket Center NASA Educator Resource Center for Marshall Space Flight Center PO Box 070015 Huntsville, AL 35807-7015 (205) 544-5812

#### **NASA Field Centers**

Each field center has an educational programs officer who is responsible for precollege education programs. In addition to administering National programs, the center offers programs and services to meet regional and local needs.

Jim Pruitt, Acting Director Education Programs Office Mail Code CL01 NASA Marshall Space Flight Center Huntsville, AL 35812-0001 (205) 544-8800

#### NASA Regional Educator Resource Center (RERC)

To offer more educators the opportunity to visit the Educator Resource Center Network (ERCN), NASA forms partnerships with planetariums, universities, museums, and other nonprofit organizations to serve as RERCs. Teachers may preview or copy NASA materials upon request.

University of Arkansas at Little Rock Natural Sciences Building, Room 215 2801 South University Little Rock, AR 72204 (501) 569-3259

#### **Space Grant Consortium**

The Space Grant Consortium in each State consists of colleges, universities, industry, and other organizations that have an interest in aeronautics and space education. Each consortium receives NASA funds for use in implementing a balanced program of research, education, and public service.

Arkansas Space Grant Consortium University of Arkansas at Little Rock Graduate Institute of Technology, ETAS 125 2801 South University Avenue Little Rock, AR 72204-1099 (501) 569-8212

### ► National Science Foundation (NSF)

### Arkansas Statewide Systemic Initiatives (SSI) Program

Business and education partnerships, plus broad-based coalitions, function as management structures to expand the mathematics and science alliances in five designated regions. The Arkansas SSI develops K–16 mathematics and science leadership through the Arkansas Crusades, a unique statewide professional development program.

Suzanne Mitchell Arkansas Department of Higher Education 114 East Capitol Avenue Little Rock, AR 72201 (501) 324-9300 / Fax: (501) 324-9308 E-mail: smitchell@ssi.edc.org

### Louisiana

### ▶ Department of Agriculture (USDA)

#### 4-H State Leader

The State 4-H Youth Development Programs are administered by the Cooperative Extension Service at land-grant universities. State 4-H leaders coordinate outreach services and training to all county offices.

Dr. Stephen R. Mullen, Program Leader 4-H and Youth Development Louisiana State University PO Box 25100 Baton Rouge, LA 70894-5100 (504) 388-2196 / Fax: (504) 388-2478 E-mail: smuller@lsuvm.sncc.lsu.edu

#### Ag in the Classroom State Leader

This program promotes increased understanding of agriculture and possible careers in the agricultural sciences. With National leadership provided by USDA, each State manages its own programs, with assistance from agribusiness, educational institutions, and government.

Barbara Langley Louisiana Farm Bureau Federation PO Box 95004 Baton Rouge, LA 70895-9004 (504) 922-6200 / Fax: (504) 922-6251

Lynda Danos 2144 Highway 1 Raceland, LA 70394 (504) 448-2395

### ► Department of Commerce (DOC)

### National Sea Grant College Program, Operation Pathfinder

The program consists of two-week summer courses that present an introduction to oceanographic and coastal processes. Courses are available in six regions and are designed to enhance skills in science teaching.

Sharon Walker Mississippi-Alabama Sea Grant Consortium and Gulf Coast Research Laboratory PO Box 7000 Ocean Springs, MS 39566-7000 (601) 374-5550 / Fax: (601) 374-5559

### ▶ Department of Defense (DoD)

#### **Eighth Air Force Museum**

The museum exhibits aircraft from pre-World War II to the modern era with an emphasis on the advancement of aviation and bombardment technology. Tours are available upon request.

Eighth Air Force Museum 88 Shreveport Road Barksdale Air Force Base, LA 71110-9260 (318) 456-5553



### Naval Reserve Force, New Orleans

This unit participates in the Navy Community Service Program through formation of partnerships with schools and other youth organizations in Louisiana, Arkansas, New Mexico, Oklahoma, and Texas.

NAVRESFOR, New Orleans Commander Naval Reserve Force 4400 Dauphine Street Code 009 New Orleans, LA 70142-5000 (504) 948-5307

# ► Department of Education (ED)

#### **Eisenhower State Coordinators**

Eisenhower State Coordinators administer the Eisenhower Professional Development Program State Formula grants. The program focuses on sustained and intensive high-quality professional development through inservice programs.

Dan K. Lewis Eisenhower Professional Development Program Louisiana Department of Education PO Box 94064 Baton Rouge, LA 70804-9064 (504) 342-3375 / Fax: (504) 342-3448

### **Eisenhower State Coordinators** for Higher Education

Eisenhower State Coordinators oversee the Eisenhower Professional Development State Formula Grants for the State Agency for Higher Education (SAHE). The program focuses on teacher enhancement through both inservice and preservice programs.

Dr. Kerry Davidson, Deputy Commissioner Academic Affairs and Sponsored Programs Eisenhower Professional Development Program Louisiana Board of Regents

150 Third Street, Suite 129 Baton Rouge, LA 70801-1389 (504) 342-4253 / Fax: (504) 342-9318

Dick Anderson, Assistant Commissioner of Sponsored Programs Eisenhower Professional Development Program Louisiana Board of Regents 1885 Wooddale Boulevard, 11th Floor Baton Rouge, LA 70806 (504) 922-0690 / Fax: (504) 922-0688

# Southeast and Islands Regional Technology in Education Consortium (SEIR\*TEC)

ED established the Regional Technology in Education Consortia (R\*TEC) program in the fall of 1995 to help States, districts, schools, adult literacy centers, and other educational institutions use advanced technology to support improved teaching and student achievement. R\*TEC's role in educational technology is unique in two ways: the emphasis is regional and the primary goal is to ensure that technology is used effectively to support school reform. Program strategies include professional development, technical assistance, and information dissemination.

Don Holznagel, Director SEIR\*TEC 41 Marietta Street NW, Suite 1000 Atlanta, GA 30303 (800) 659-3204 (404) 893-0100 / Fax: (404) 577-7812 E-mail: dholznag@serve.org WWW: http://www.serve.org/seir-tec/

Deborah Williams, R\*TEC Project Officer U.S. Department of Education Office of Educational Research and Improvement ORAD/SLSD, Room 504f 555 New Jersey Avenue NW Washington, DC 20208-5644 (202) 219-2204 E-mail: Deborah\_Williams@ed.gov

### Southwest Consortium for the Improvement of Mathematics and Science Teaching (SCIMAST)

The Eisenhower Regional Consortium provides information and technical assistance to help States and school districts improve mathematics and science education.

Stephen Marble, Director SCIMAST 211 East Seventh Street Austin, TX 78701 (512) 476-6861 / Fax: (512) 476-2286 WWW: http://www.sedl.org/sedl/ scimast.html

### Southwest Educational Development Laboratory (SEDL)

SEDL identifies effective teaching techniques and school improvement efforts within the region and shares this information with State and local educators.

Wesley A. Hoover, Executive Director SEDL 211 East Seventh Street Austin, TX 78701 (512) 476-6861 / Fax: (512) 476-2286 WWW: http://www.sedl.org

### ▶ Department of Energy (DOE)

#### Strategic Petroleum Reserve

The reserve provides teacher fellowships, student support programs, and curriculum material loans and sponsors a Regional Science Bowl.

Durinda Robinson, Special Assistant Strategic Petroleum Reserve 900 Commerce Road East New Orleans, LA 70123 (504) 734-4312 / Fax: (504) 734-4672

### ▶ Department of the Interior (DOI)

### **Bayou Sauvage National Wildlife Refuge**

Guided walks and canoe trips at the refuge promote awareness in wetlands management. In-class presentations are also available.

Lynn Payne Bayou Sauvage National Wildlife Refuge 1010 Grause Boulevard, Building 936 Slidell, LA 70458 (504) 646-7555 / Fax: (504) 646-7588

### **Bureau of Land Management Eastern States Office**

This office provides information about educational programs, materials, and local land-management issues.

Education Coordinator Bureau of Land Management 7450 Boston Boulevard Springfield, VA 22153 (703) 440-1713

# Career Oriented Science and Mathematics Integrated Course (COSMIC)

This three-week summer program is designed to encourage girls in exploring future careers in the fields of science and math. Participants meet women professionals in various fields.



**BEST COPY AVAILABLE** 

Gail B. Rainey, Physical Oceanographer 1201 Elmwood Park Boulevard New Orleans, LA 70123 (504) 736-2792 / Fax: (504) 736- 2610

### **Minerals Management Service** (MMS) Regional Office

The MMS Regional Office provides a range of educational services. Teacher inservice programs and classroom visitations may include supplemental materials. Availability may be limited, but arrangements may be made for duplication of some materials at minimal cost.

Gulf of Mexico Outer Continental Shelf Region Minerals Management Service Office of Public Affairs 1201 Elmwood Park Boulevard, MS 5000 New Orleans, LA 70123-2394 (504) 736-2595 (800) 200-GULF / Fax: (504) 736-2459

### **Project WILD**

Project WILD offers teacher training and educational materials. Teacher guides, free to teachers who attend the training session, contain more than 80 supplementary, interdisciplinary activities for grades K-12.

Wayne Huston, Project WILD Coordinator Department of Wildlife and Fisheries PO Box 98000 Baton Rouge, LA 70898-9000 (504) 765-2922 / Fax: (504) 763-3568

#### **National Wetland Research** Center

In a four-week Summer Teacher Enhancement Institute, high school science teachers are offered the opportunity to experience microscopic methods as currently applied in the study of wetland microbial community dynamics. Efforts are made to apply what the teachers learn to curriculum design and implementation during the institute and in follow-up.

Workshop on Wetlands Mapping and GIS for Educators is an eight-hour workshop providing hands-on experience with the Geographic Information System (GIS) software MapiX. Teachers display and query historical databases on marsh and wetland distribution. The workshop includes a discussion of wetland processes.

Gerald Grau, Assistant Director National Wetland Research Center 700 Cajundome Boulevard Lafayette, LA 70506 (318) 266-8500 / Fax: (318) 2666-8513 E-mail: grauj@nwrc.gov

#### Science Center

Earth Stewards: A Partnership Among Resource Professionals, Neighborhood

Schools, and Communities uses resources of the Fish and Wildlife Service to educate school children and communities about biological resources and local conservation

Saturday Science Academy provides enrichment activities related to science, math, computer, language arts, and art. Children in grades 3-8 meet four hours each Saturday during the spring and summer semesters.

Wendell D. Calhoun, Communication Specialist Southern Science Center 700 Cajundome Blvd. Lafayette, LA 70506 (318) 266-8550 or 8553 / Fax: (318) 266-8513 E-mail: calhoun@nwrc.gov

### Southeast Louisiana Refuges

Introduction to the Wetlands allows students to learn about this environment through hands-on activities. Sessions can be conducted on land or from canoes and walkways. The program includes activities with all plants and animals found in a south Louisiana freshwater marsh.

William Lynn Payne, Environmental **Education Specialist** Southeast Louisiana Refuges 1010 Gause Boulevard, Building 936 Slidell, LA 70458 (504) 646-7555 / Fax: (504) 646-7558

### ▶ Department of Labor (DOL)

### Job Training Partnership Act (ITPA) Liaison

The JTPA Liaison can provide information about the Job Training Partnership Act State and local programs for economically disadvantaged adults and youth.

Joseph Stone, Assistant Secretary Louisiana Office of Labor PO Box 94094 Baton Rouge, LA 70804-9094 (504) 342-7693 / Fax: (504) 342-7960

### Department of **Transportation (DOT)**

### **Federal Aviation Administration** (FAA) Aviation Education

The FAA Aviation Education Representative coordinates aviation education services,

including materials and programs for the FAA in the States assigned to the region.

Programs include the following:

- The Aviation Career Education (ACE) Academy is a one-week summer aviation education program for high school students sponsored by the FAA along with a host educational institution. The program provides students with diverse experiences in aviation career exploration. The focus is on aviation career clusters identified by FAA, with an emphasis on opportunities for women and minorities. A goal is to have one program in each State and U.S. Territory. The FAA will conduct regional leadership workshops and provide funds based on the availability of resources.
- Aviation Education Workshops for Teachers provide teachers with information on FAA aviation programs and materials and prepare them to teach aviation in the classroom. Annual workshops are conducted at colleges and universities across the Nation. The FAA provides information, materials, and speakers for the pro-
- National Congress on Aviation and Space Education is sponsored annually by the FAA in partnership with the National Aeronautics and Space Administration and the Civil Air Patrol. The meeting includes teacher workshops and crosstalk sessions to exchange ideas on promoting aerospace education.

Debra Myers, ASW-18B FAA Aviation Education Representative 2601 Meacham Boulevard Fort Worth, TX 76193-018B (817) 222-5833 / Fax: (817) 222-5950

### **FAA Aviation Education Resource** Centers

Located at colleges, museums, and State aviation authority offices, these centers function as information distribution centers for Federal Aviation Administration education materials and resources. The Resource Centers maintain and provide quantities of printed materials, videotapes, and computer educational software. Center personnel can also provide general information, conduct workshops, and make aviation-related presentations.

Dr. Marlon Abbas, Director Aviation Education Resource Center Louisiana State University Transportation Systems Group Louisiana Transportation Research Center 4101 Gourrier Avenue Baton Rouge, LA 70808 (504) 767-9127



Ernie Bruce Aviation Education Resource Center Northeast Louisiana University Room 103 Chemistry and Natural Sciences Building Monroe, LA 71209-0590 (318) 342-1784

# ► Environmental Protection Agency (EPA)

#### **EPA Regional Office**

This office takes part in a variety of environmental education programs for both teachers and students. Programs range from teacher workshops and student contests to in-school presentations. Information on environmental issues is also available through the Public Information Center located at the office.

Jo Taylor, Environmental Education Coordinator Environmental Protection Agency 1445 Ross Avenue (6X) Dallas, TX 75202 (214) 655-2204 / Fax: (214) 655-2118

### The President's Environmental Youth Awards (PEYA) Program

Young people from each State are invited to participate in PEYA, a nationwide program designed to encourage individuals, school classes, summer camps, public interest groups, and youth organizations to promote environmental awareness and community involvement. The two components of the program are the regional certificate program and the National awards competition. Regional certificates, signed by the President, are awarded to each participant by EPA Regional Offices. National individual project winners, or one representative from a National awardwinning group project, along with one sponsor, are honored at EPA headquarters, Washington, DC. Interested K-12 individuals or groups may obtain application materials and contest rules by contacting the EPA Regional Office that serves their State. PEYA has been an ongoing project since it was created by the White House Office of Education and the EPA in 1971.

EPA Region 6 1445 Ross Avenue Dallas, TX 75202-2733 (214) 655-2204 / Fax: (214) 655-2118

# ► National Aeronautics and Space Administration (NASA)

#### **NASA Educator Resource Center**

The center has NASA-related educational materials in various formats, including laserdiscs, CD-ROMs, videotapes, slides, audiotapes, publications, and teacher guides. Educators may preview or copy NASA materials upon request.

U.S. Space and Rocket Center NASA Educator Resource Center for Marshall Space Flight Center PO Box 070015 Huntsville, AL 35807-7015 (205) 544-5812

#### **NASA Field Centers**

Each field center has an educational programs officer who is responsible for precollege education programs. In addition to administering National programs, the center offers programs and services to meet regional and local needs.

Jim Pruitt, Acting Director Education Programs Office Mail Code CL01 NASA Marshall Space Flight Center Huntsville, AL 35812-0001 (205) 544-8800

### NASA Regional Educator Resource Center (RERC)

To offer more educators the opportunity to visit the Educator Resource Center Network (ERCN), NASA forms partnerships with planetariums, universities, museums, and other nonprofit organizations to serve as RERCs. Teachers may preview or copy NASA materials upon request.

Bossier Parish Community College NASA Regional Educator Resource Center 2719 Airline Drive Bossier City, LA 71111 (318) 746-7754

Southern University-Shreveport NASA Regional Educator Resource Center Downtown Metro Center 610 Texas Street Shreveport, LA 71101 (318) 674-3444

#### **Space Grant Consortium**

The Space Grant Consortium in each State consists of colleges, universities, industry, and other organizations that have an interest in aeronautics and space education. Each consortium receives NASA funds for use in implementing a balanced program of research, education, and public service.

Louisiana Space Grant Consortium Louisiana State University Department of Physics and Astronomy 227 Nicholson Hall Baton Rouge, LA 70803-4001 (504) 388-8697

## ► National Science Foundation (NSF)

### Louisiana's Statewide Systemic Initiatives (SSI) Program

Louisiana's SSI Program is designed to modernize mathematics and science curricula through changes in teacher preparation programs and enhancement of teaching skills. The integration of math and science standards into curriculum development, textbook adoption, and assessment is a key objective, while additional objectives include upgrading teacher certification standards, incorporating technologies into the classroom, and involving parents in education.

Kerry Davidson, Senior Deputy Commissioner Academic Affairs and Sponsored Research Louisiana Board of Regents 150 Riverside Mall, Suite 129 Baton Rouge, LA 70801-1389 (504) 342-4253 / Fax: (504) 342-9318 E-mail: kdavidson@ssi.edc.org

### New Mexico

### ▶ Department of Agriculture (USDA)

#### 4-H State Leader

The State 4-H Youth Development Programs are administered by the Cooperative Extension Service at land-grant universities. State 4-H leaders coordinate outreach services and training to all county offices.

Jesse Holloway, Extension Department Head 4-H and Family Neale Hall, Room 286 Drawer 3AE, New Mexico State University Las Cruces, NM 88003-0003 (505) 646-3026 or 1157 / Fax: (505) 646-5975 E-mail: jholloway@nmsu.edu

#### Ag in the Classroom State Leader

This program promotes increased understanding of agriculture and possible careers in the agricultural sciences. With National lead-



ership provided by USDA, each State manages its own programs, with assistance from agribusiness, educational institutions, and government.

Smokey Blanton, AITC State Chairman New Mexico Farm and Livestock Bureau 421 North Water Las Cruces, NM 88001 (505) 526-5521 / Fax: (505) 525-0858

# ► Department of Defense (DoD)

#### **Phillips Laboratory**

The laboratory offers student apprenticeship programs designed to motivate students towards engineering and technical careers.

Richard Keppler Phillips Laboratory/CA 3550 Aberdeen Avenue, SE Kirkland AFB, NM 87117-5776 (505) 846-1327

# ► Department of Education (ED)

#### **Eisenhower State Coordinators**

Eisenhower State Coordinators administer the Eisenhower Professional Development Program State Formula grants. The program focuses on sustained and intensive high-quality professional development through inservice programs.

Patricia Valdez
Eisenhower Professional Development
Program
New Mexico Department of Education
300 Don Gaspar Street
Santa Fe, NM 87501-2786
(505) 827-4244 / Fax: (505) 827-6694

### **Eisenhower State Coordinators** for Higher Education

Eisenhower State Coordinators oversee the Eisenhower Professional Development State Formula Grants for the State Agency for Higher Education (SAHE). The program focuses on teacher enhancement through both inservice and preservice programs.

Dr. Bill Simpson
Eisenhower Professional Development
Program
New Mexico Commission of Higher
Education
1068 Cerrillos Road
Santa Fe, NM 87501-4295
(505) 827-7383 / Fax: (505) 827-7392

# Pacific and Southwest Regional Technology in Education Consortium (PSR\*TEC)

ED established the Regional Technology in Education Consortia (R\*TEC) program in the fall of 1995 to help States, districts, schools, adult literacy centers, and other educational institutions use advanced technology to support improved teaching and student achievement. R\*TEC's role in educational technology is unique in two ways: the emphasis is regional and the primary goal is to ensure that technology is used effectively to support school reform. Program strategies include professional development, technical assistance and information dissemination.

Kevin Rocap, Director
PSR\*TEC
Center for Language Minority Education and
Research
c/o College of Education
California State University, Long Beach
1250 Bellflower Boulevard
Long Beach, CA 90840-2201
(310) 985-1570 / Fax: (310) 985-4528
E-mail: krocap@csulb.edu
WWW: http://www.csulb.edu/~clmer/
pswrtc/pswrtc.html

Neal Kaske, R\*TEC Project Officer
U.S. Department of Education
Office of Educational Research and
Improvement
Office of Library Programs, Room 300h
555 New Jersey Avenue NW
Washington, DC 20208-5571
(202) 219-1871
E-mail: nkaske@inet.ed.gov

### Southwest Consortium for the Improvement of Mathematics and Science Teaching (SCIMAST)

The Eisenhower Regional Consortium provides information and technical assistance to help States and school districts improve mathematics and science education.

Stephen Marble, Director SCIMAST 211 East Seventh Street Austin, TX 78701 (512) 476-6861 / Fax: (512) 476-2286 WWW: http://www.sedl.org/sedl/ scimast.html

### Southwest Educational Development Laboratory (SEDL)

SEDL identifies effective teaching techniques and school improvement efforts within the region and shares this information with State and local educators.

Wesley A. Hoover, Executive Director SEDL 211 East Seventh Street Austin, TX 78701 (512) 476-6861 / Fax: (512) 476-2286 WWW: http://www.sedl.org

# ► Department of Energy (DOE)

### Adventures in Supercomputing (AiS)

The AiS program is designed to foster and enhance the participation of diverse populations of high school students in mathematics, science, and computing.

Barbara G. Summers, Education Program Manager Oak Ridge National Laboratory Office of University and Science Education PO Box 2008, MS 6366 Oak Ridge, TN 37831-6366 (423) 241-3705 / Fax: (423) 241-6776 E-mail: summersbg@ornl.gov

### Inhalation Toxicology Research Institute (ITRI)

ITRI promotes environmental health science education through teacher research programs, high school summer programs, facility tours, and minority outreach programs.

Marcy Wood, Specialist Inhalation Toxicology Research Institute PO Box 5890 Albuquerque, NM 87185 (505) 845-1257 / Fax: (505) 845-1198 E-mail: mwood@lucy.tli.org

### Los Alamos National Laboratory

The laboratory provides teacher enhancement workshops, student research internships, summer programs for students, outreach programs, and educational technology programs.

Judith Kaye, Group Leader Science Education and Outreach Los Alamos National Laboratory PO Box 1663 HR-SEO, P278 Los Alamos, NM 87545 (505) 667-1919 / Fax: (505) 665-4093 E-mail: jkaye@lanl.gov

### Sandia National Laboratories (New Mexico)

The laboratories offer a quality organization program for schools, a science enhancement program for teachers, and a student mentorship program.



Anthony Thornton, Ph.D., Director Diversity Leadership and Education Outreach Sandia National Laboratories/New Mexico MS 1356 PO Box 5800 Albuquerque, NM 87185-1356 (505) 271-7984 / Fax: (505) 271-4104 E-mail: althorn@sandia.gov

### ▶ Department of the Interior (DOI)

#### **Aztec Ruins National Monument**

The monument offers educators guided walks and a teacher guide that focuses primarily on anthropology and history, but also incorporates aspects of environmental education.

Interpretation Division Aztec Ruins National Monument PO Box 640 Aztec, NM 87410 (505) 334-6174

### Bosque del Apache National Wildlife Refuge

Teacher workshops, in-school presentations, and various other environmental education activities are offered through the refuge.

Outdoor Recreation Planner Bosque Del Apache National Wildlife Refuge PO Box 1246 Socorro, NM 87801 (505) 835-1828 / Fax: (505) 835-0324

### Bureau of Indian Affairs (BIA) Hands-On Science and Mathematics Workshop

These hands-on courses are presently being provided by Sandia National Laboratories staff working with Adams State College under a joint Sandia/Adams Memorandum of Agreement to enhance science and mathematics education as part of the Office of Indian Education Programs of the BIA. The latest courses provide hands-on instruction in e-mail, Internet, and electronic and telecomputing methods for the practical science and mathematics classroom.

Dr. Byron Dean, Program Coordinator MS 1351, Department 3020 Sandia National Laboratories PO Box 5800 Albuquerque, NM 87185 (505) 889-2322

### Bureau of Land Management State Office

This office provides information about educational programs, materials, and local

land-management issues.

Theresa Herrera Bureau of Land Management PO Box 27115 Santa Fe, NM 87502-0115 (505) 438-7841

#### Carlshad Caverns National Park

Programs offered educate students and teachers about the site's geology and natural history. The Environmental Education in the Chihuahuan Desert—Parks as Classrooms program involves teacher workshops, one week-long workshop through New Mexico State University for graduate credit, and two-day workshops for teachers from Juarez, Mexico and the local area.

Teresa M. Jaskiewicz, Outreach/Education Coordinator Carlsbad Caverns National Park 3225 National Parks Highway Carlsbad, NM 88220 (505) 785-2232, ext. 432 Fax: (505) 785-2133

#### **Project WILD**

Project WILD offers teacher training and educational materials. Teacher guides, free to teachers who attend the training session, contain more than 80 supplementary, interdisciplinary activities for grades K-12.

Eddie Bennett, Project WILD Coordinator New Mexico Game and Fish Department State Capitol Building Santa Fe, NM 87503 (505) 827-7867 / Fax: (505) 827-7801

#### Sandia National Laboratories

RAISE: Rural American Indian Science Education Workshop provides an elementary and a secondary component. The elementary component is piloting a new type of science and math curriculum, Full Option Science System (FOSS). The training workshop will be focused on learning the activities associated with the kits/modules to be used in the school during the school year. The secondary component consists of a two-week teacher workshop. The first week of the workshop is for training in the specific use of the activities and kits. The second week is scheduled for student teaching and computer training.

Ruth Bitsui, Program Coordinator MS 1351, Department 3020 Sandia National Laboratories PO Box 5800 Albuquerque, NM 87185 (505) 889-2341

#### White Sands National Monument

The monument sponsors a number of educational programs:

- ► Camping in the Dunes allows students to learn about minimum-impact resource use, ethics, camping skills, desert ecology, astronomy, and animal tracks on an overnight camping trip with a ranger.
- ▶ Desert and Dunefield Ecology sends students on a nature walk in the dunefield, where they learn the characteristics of a desert and how plants and animals adapt to desert and dunefield conditions.
- Five-day teacher workshops introduce teachers to park resources and hands-on activities in the areas of geology, desert ecology, Tularosa Basin history, endangered species, exotics, and biodiversity. This workshop includes two field trips. In an overnight workshop, teachers learn about minimum impact resource use, ethics, and camping skills in a classroom pre-session. In an overnight camping trip in the field, they learn about desert ecology and astronomy and practice minimum impact resource use.
- ▶ Geology of Tularosa Basin and Gypsum Dunefield allows students to climb a dune that provides a view of the mountains (source of gypsum), a small playa (model of larger one that is the source of sand), the plains, and the dunefield. They learn how the basin and dunefield were formed.
- ▶ Project Learning Tree (PLT) Workshop is a supplemental environmental education program that uses forests as the vehicle to teach basic ecological principles. Teachers are introduced to the program, activities, and activity guide by participating in and leading activities.
- ▶ Project Wild Workshop introduces the teachers to the program and activity guides. They participate in doing and leading the activities. Project Wild uses wildlife as the vehicle to teach basic ecological principles.

Anne Doherty, Education Specialist White Sands National Monument PO Box 1086 Holloman AFB, NM 88330-1086 (505) 479-6124 / Fax: (505) 437-9971

# ➤ Department of Labor (DOL)

### Job Training Partnership Act (JTPA) Liaison

The JTPA Liaison can provide information about the Job Training Partnership Act State and local programs for economically disadvantaged adults and youth.



Patrick G. Baca, Secretary New Mexico Department of Labor PO Box 1928 Albuquerque, NM 87103 (505) 841-8409 / Fax: (505) 841-8491

### ▶ Department of Transportation (DOT)

### Federal Aviation Administration (FAA) Aviation Education

The FAA Aviation Education Representative coordinates aviation education services, including materials and programs for the FAA in the States assigned to the region.

Programs include the following:

- ▶ The Aviation Career Education (ACE)
  Academy is a one-week summer aviation
  education program for high school students sponsored by the FAA along with a
  host educational institution. The program
  provides students with diverse experiences
  in aviation career exploration. The focus
  is on aviation career clusters identified by
  FAA, with an emphasis on opportunities
  for women and minorities. A goal is to
  have one program in each State and U.S.
  Territory. The FAA will conduct regional
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- ► Aviation Education Workshops for Teachers provide teachers with information on FAA aviation programs and materials and prepare them to teach aviation in the classroom. Annual workshops are conducted at colleges and universities across the Nation. The FAA provides information, materials, and speakers for the program.
- ▶ National Congress on Aviation and Space Education is sponsored annually by the FAA in partnership with the National Aeronautics and Space Administration and the Civil Air Patrol. The meeting includes teacher workshops and crosstalk sessions to exchange ideas on promoting aerospace education.

Debra Myers, ASW-18B, FAA Aviation Education Representative 2601 Meacham Boulevard Fort Worth, TX 76193-018B (817) 222-5833 / Fax: (817) 222-5950

### FAA Aviation Education Resource Centers

Located at colleges, museums, and State aviation authority offices, these centers function as information distribution centers for Federal Aviation Administration education materials and resources. The Resource

Centers maintain and provide quantities of printed materials, videotapes, and computer educational software. Center personnel can also provide general information, conduct workshops, and make aviation-related presentations.

Judy McShannon Aviation Education Resource Center New Mexico State University Goddard Hall, Room 103 Las Cruces, NM 88003-0001 (505) 646-6414

Richard S. Sanchez, Director Aviation Education Resource Center University of New Mexico FAA/NASA Educator Resource Center Division of Continuing Education Albuquerque, NM 87131-4006 (505) 277-2631

# ► Environmental Protection Agency (EPA)

### **EPA Regional Office**

This office takes part in a variety of environmental education programs for both teachers and students. Programs range from teacher workshops and student contests to in-school presentations. Information on environmental issues is also available through the Public Information Center located at the office.

Jo Taylor, Environmental Education Coordinator Environmental Protection Agency 1445 Ross Avenue (6X) Dallas, TX 75202 (214) 655-2204 / Fax: (214) 655-2118

### The President's Environmental Youth Awards (PEYA) Program

Young people from each State are invited to participate in PEYA, a nationwide program designed to encourage individuals, school classes, summer camps, public interest groups, and youth organizations to promote environmental awareness and community involvement. The two components of the program are the regional certificate program and the National awards competition. Regional certificates, signed by the President, are awarded to each participant by EPA Regional Offices. National individual project winners, or one representative from a National awardwinning group project, along with one sponsor, are honored at EPA headquarters, Washington, DC. Interested K-12 individuals or groups may obtain application materials and contest rules by contacting the EPA Regional Office that serves their State. PEYA has been an ongoing project since it was created by the White House Office of Education and the EPA in 1971.

EPA Region 6 1445 Ross Avenue Dallas, TX 75202-2733 (214) 655-2204 / Fax: (214) 655-2118

# ► National Aeronautics and Space Administration (NASA)

#### **NASA Educator Resource Center**

The center has NASA-related educational materials in various formats, including laserdiscs, CD-ROMs, videotapes, slides, audiotapes, publications, and teacher guides. Educators may preview or copy NASA materials upon request.

NASA Johnson Space Center Educator Resource Center Mail Code AP-2 2101 NASA Road One Houston, TX 77058-3696 (713) 483-8696

#### **NASA Field Centers**

Each field center has an educational programs officer who is responsible for precollege education programs. In addition to administering National programs, the center offers programs and services to meet regional and local needs.

Dr. Robert W. Fitzmaurice, Center Education Programs Officer Public Affairs Office AP2 NASA Johnson Space Center 2101 NASA Road One Houston, TX 77058-3696 (713) 483-1257

### NASA Regional Educator Resource Center (RERC)

To offer more educators the opportunity to visit the Educator Resource Center Network (ERCN), NASA forms partnerships with planetariums, universities, museums, and other nonprofit organizations to serve as RERCs. Teachers may preview or copy NASA materials upon request.

University of New Mexico NASA Regional Educator Resource Center Continuing Education and Community Service 1634 University Boulevard NE Albuquerque, NM 87131-4006 (505) 277-3861



New Mexico State University NASA Regional Educator Resource Center New Mexico Space Grant Consortium Box 30001, Department SG Las Cruces, NM 88003-0001 (505) 646-6414

#### **Space Grant Consortium**

The Space Grant Consortium in each State consists of colleges, universities, industry, and other organizations that have an interest in aeronautics and space education. Each consortium receives NASA funds for use in implementing a balanced program of research, education, and public service.

New Mexico Space Grant Consortium New Mexico State University PO Box 30001, Department SG Las Cruces, NM 88003-0001 (505) 646-6414

# ► National Science Foundation (NSF)

### New Mexico's Statewide Systemic Initiatives (SSI) Program

New Mexico's SSI Program advocates restructuring mathematics and science education and coordinating resources. The RE:Learning model for school-based reform incorporates new content and pedagogy into mathematics and science curricula.

Albert Zanora New Mexico Department of Education 300 Don Gaspar Street Santa Fe, NM 87501 (505) 827-6508

### **Oklahoma**

# ► Department of Agriculture (USDA)

#### 4-H State Leader

The State 4-H Youth Development Programs are administered by the Cooperative Extension Service at land-grant universities. State 4-H leaders coordinate outreach services and training to all county offices.

State 4-H Program Leader Oklahoma State University Room 205, Poultry Building Stillwater, OK 74078-6063 (405) 744-5391 / Fax: (405) 744-6522

### Ag in the Classroom State Leader

This program promotes increased understanding of agriculture and possible careers in the agricultural sciences. With National leadership provided by USDA, each State manages its own programs, with assistance from agribusiness, educational institutions, and government.

Dr. Charles Cox Oklahoma State University Room 205, Poultry Building Stillwater, OK 74078-6063 (405) 744-5391 / Fax: (405) 744-6522

Jo Theimer Oklahoma Department of Agriculture 2800 North Lincoln Building Oklahoma City, OK 73105-4298 (405) 521-3864 / Fax: (405) 521-4912

### ▶ Department of Education (ED)

#### **Eisenhower State Coordinators**

Eisenhower State Coordinators administer the Eisenhower Professional Development Program State Formula grants. The program focuses on sustained and intensive high-quality professional development through inservice programs.

Keith Haley Eisenhower Professional Development Program Oklahoma Department of Education 2500 North Lincoln Boulevard Oklahoma City, OK 73105 (405) 521-3694 / Fax: (405) 521-6205

### **Eisenhower State Coordinators** for Higher Education

Eisenhower State Coordinators oversee the Eisenhower Professional Development State Formula Grants for the State Agency for Higher Education (SAHE). The program focuses on teacher enhancement through both inservice and preservice programs.

Kermit McMurry
Eisenhower Professional Development
Program
Oklahoma Regents for Higher Education
500 Education Building, State Complex
Oklahoma City, OK 73105-4503
(405) 524-9100 / Fax: (405) 524-9230

### South Central Regional Technology in Education Consortium (SCR\*TEC)

ED established the Regional Technology in Education Consortia (R\*TEC) program in the fall of 1995 to help States, districts,

schools, adult literacy centers, and other educational institutions use advanced technology to support improved teaching and student achievement. R\*TEC's role in educational technology is unique in two ways: the emphasis is regional and the primary goal is to ensure that technology is used effectively to support school reform. Program strategies include professional development, technical assistance, and information dissemination.

Jerry D. Chaffin and Ron Aust, Co-Directors SCR\*TEC
Center for Research on Learning
University of Kansas
Suite 2021—Dole Human Development
Building
Lawrence, KS 66045
(913) 864-0699 or 4954
Fax: (913) 864-4149
WWW: http://scrtec.org/

Stephen Balkcom, R\*TEC Project Officer U.S. Department of Education Office of Educational Research and Improvement ORAD/SLSD, Room 506g 555 New Jersey Avenue NW Washington, DC 20208-5644 (202) 219-2089 E-mail: sbalkcom@inet.ed.gov

### Southwest Consortium for the Improvement of Mathematics and Science Teaching (SCIMAST)

The Eisenhower Regional Consortium provides information and technical assistance to help States and school districts improve mathematics and science education.

Stephen Marble, Director SCIMAST 211 East Seventh Street Austin, TX 78701 (512) 476-6861 / Fax: (512) 476-2286 WWW: http://www.sedl.org/sedl/ scimast.html

### Southwest Educational Development Laboratory (SEDL)

The Regional Educational Laboratory identifies effective teaching techniques and school improvement efforts within the region and shares this information with State and local educators.

Wesley A. Hoover, Executive Director SEDL 211 East Seventh Street Austin, TX 78701 (512) 476-6861 / Fax: (512) 476-2286 WWW: http://www.sedl.org



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# ► Department of Energy (DOE)

### National Institute for Petroleum and Energy Research (NIPER)

The Education Outreach Program at NIPER develops partnerships to promote industry and community support of science education. Programs include teacher training, workshops, student research programs, a teacher intern program, and the Oklahoma Science Bowl. For example, Teacher Training in Oil and Gas Exploration is a five-day course that provides an awareness of America's dependence on oil-based products, an understanding of basic earth science concepts as applied to the exploration of oil and gas, first-hand experience with the tools used in exploration, and a field trip.

Judy Kokesh, Technology Transfer Specialist National Institute for Petroleum and Energy Research

PO Box 2565 Bartlesville, OK 74005 (918) 337-4508 / Fax: (918) 337-4365 E-mail: jkokesh@bpo.gov

# ► Department of the Interior (DOI)

### **Bureau of Land Management State Office**

This office provides information about educational programs, materials, and local land-management issues.

Theresa Herrera Bureau of Land Management PO Box 27115 Santa Fe, NM 87502-0115 (505) 438-7841

### Chickasaw National Recreation Area

The park offers guided nature walks that focus on geology and environmental education.

Division of Interpretation Chickasaw National Recreation Area PO Box 201 Sulphur, OK 73086 (405) 622-3161

#### **Project WILD**

Project WILD offers teacher training and educational materials. Teacher guides, free to teachers who attend the training session, contain more than 80 supplementary, interdisciplinary activities for grades K–12.

Lisa Anderson, Project WILD Co-Coordinator Department of Wildlife Conservation 1801 North Lincoln Boulevard

Oklahoma City, OK 73105 (405) 521-6704 / Fax: (405) 521-6898

Lisa Knauf, Project WILD Co-Coordinator Oklahoma Conservation Commission 2800 North Lincoln Boulevard, Suite 160 Oklahoma City, OK 73105 (405) 521-2384 / Fax: (405) 521-6686

### Wichita Mountains National Wildlife Refuge

Wichita Mountains National Wildlife Refuge offers environmental education programs, including teacher-accredited workshops. Curriculum materials are available.

Programs include the following:

- ▶ Biodiversity—The Wichita Biome uses the refuge as a showcase and center of biodiversity protection. The staff involve participants in an action-based curriculum designed to help assess the health of their environment. The curriculum provides a strong base in biological sciences interspersed with political and social science. Students analyze various components of their environment, such as air quality, water quality, floral and faunal components, and cultural diversity.
- Edible Plants is a program used to give students a sense of humankind's relationship to nature and dependence on habitat. Students learn to recognize and use several common prairie plant species, and correlate their activities to the maintenance of healthy grassland conditions.
- ▶ Geology: The Past, Present, and Future of the Wichita Mountains is an overview of the geologic history of the Wichita Mountains. It teaches basic identification techniques of rocks and minerals. Special emphasis is placed on mankind's impact on the resources, from early gold mining through present-day recreational and industrial impacts.

Claudine Daniel, Environmental Education Specialist Wichita Mountains NWR R.R. #1, Box 448 Indiahoma, OK 73552 (405) 429-3221 / Fax: (405) 429-9323

# ► Department of Labor (DOL)

### Job Training Partnership Act (JTPA) Liaison

The JTPA Liaison can provide information about the Job Training Partnership Act State and local programs for economically disadvantaged adults and youth.

Glen E. Robards, Jr., Director of JTPA Oklahoma Employment Security Commission 201 Will Rogers Building Oklahoma City, OK 73105 (405) 557-5329 / Fax: (405) 557-7256

# ► Department of Transportation (DOT)

### Federal Aviation Administration (FAA) Aviation Education

The FAA Aviation Education Representative coordinates aviation education services, including materials and programs for the FAA in the States assigned to the region.

Programs include the following:

- ▶ The Aviation Career Education (ACE)
  Academy is a one-week summer aviation education program for high school students sponsored by the FAA along with a host educational institution. The program provides students with diverse experiences in aviation career exploration. The focus is on aviation career clusters identified by FAA, with an emphasis on opportunities for women and minorities. A goal is to have one program in each State and U.S. Territory. The FAA will conduct regional leadership workshops and provide funds based on the availability of resources.
- ▶ Aviation Education Workshops for Teachers provide teachers with information on FAA aviation programs and materials and prepare them to teach aviation in the classroom. Annual workshops are conducted at colleges and universities across the Nation. The FAA provides information, materials, and speakers for the program.
- ▶ National Congress on Aviation and Space Education is sponsored annually by the FAA in partnership with the National Aeronautics and Space Administration and the Civil Air Patrol. The meeting includes teacher workshops and crosstalk sessions to exchange ideas on promoting aerospace education.



Debra Myers, ASW-18B, FAA Aviation Education Representative 2601 Meacham Boulevard Fort Worth, TX 76193 (817) 222-5833 / Fax: (817) 222-5950

Robert Hoppers, AMC-5, FAA Aviation Education Representative Aeronautical Center FAA Mike Monroney PO Box 25082 Oklahoma City, OK 73125 (405) 680-7500 / Fax: (405) 954-4551

### FAA Aviation Education Resource Centers

Located at colleges, museums, and State aviation authority offices, these centers function as information distribution centers for Federal Aviation Administration education materials and resources. The Resource Centers maintain and provide quantities of printed materials, videotapes, and computer educational software. Center personnel can also provide general information, conduct workshops, and make aviation-related presentations.

Dr. Lee Morris, Director Aviation Education Resource Center University of Oklahoma Education and Aviation/Aerospace 1700 Asp Avenue Norman, OK 73037-0001 (405) 325-1964

Steve Marks
Oklahoma State University
FAA Resource Center
308A CITD Building
Stillwater, OK 74078
(405) 744-7015

# ► Environmental Protection Agency (EPA)

#### **EPA Regional Office**

This office takes part in a variety of environmental education programs for both teachers and students. Programs range from teacher workshops and student contests to in-school presentations. Information on environmental issues is also available through the Public Information Center located at the office.

Jo Taylor, Environmental Education Coordinator Environmental Protection Agency 1445 Ross Avenue (6X) Dallas, TX 75202 (214) 655-2204 / Fax: (214) 655-2118

### The President's Environmental Youth Awards (PEYA) Program

Young people from each State are invited to participate in PEYA, a nationwide program designed to encourage individuals, school classes, summer camps, public interest groups, and youth organizations to promote environmental awareness and community involvement. The two components of the program are the regional certificate program and the National awards competition. Regional certificates, signed by the President, are awarded to each participant by EPA Regional Offices. National individual project winners, or one representative from a National awardwinning group project, along with one sponsor, are honored at EPA headquarters, Washington, DC. Interested K-12 individuals or groups may obtain application materials and contest rules by contacting the EPA Regional Office that serves their State. PEYA has been an ongoing project since it was created by the White House Office of Education and the EPA in 1971.

EPA Region 6 1445 Ross Avenue Dallas, TX 75202-2733 (214) 655-2204 / Fax: (214) 655-2118

### Robert S. Kerr Environmental Research Laboratory

Student employment and partnership programs are offered through the laboratory.

U.S. Environmental Protection Agency Robert S. Kerr Environmental Research Laboratory PO Box 1198 Ada, OK 74820 (405) 338-8800

### ► National Aeronautics and Space Administration (NASA)

#### NASA Educator Resource Center

The center has NASA-related educational materials in various formats, including laserdiscs, CD-ROMs, videotapes, slides, audiotapes, publications, and teacher guides. Educators may preview or copy NASA materials upon request.

NASA Johnson Space Center Educator Resource Center Mail Code AP-2 2101 NASA Road One Houston, TX 77058-3696 (713) 483-8696

#### **NASA Field Centers**

Each field center has an educational programs officer who is responsible for precollege education programs. In addition to administering National programs, the center offers programs and services to meet regional and local needs.

Dr. Robert W. Fitzmaurice, Center Education Programs Officer Public Affairs Office AP2 NASA Johnson Space Center 2101 NASA Road One Houston, TX 77058-3696 (713) 483-1257

### NASA Regional Educator Resource Center (RERC)

To offer more educators the opportunity to visit the Educator Resource Center Network (ERCN), NASA forms partnerships with planetariums, universities, museums, and other nonprofit organizations to serve as RERCs. Teachers may preview or copy NASA materials upon request.

Oklahoma State University NASA Aerospace Education Resource Center 308A CITD Stillwater, OK 74078-0422 (405) 744-7009

### **Space Grant Consortium**

The Space Grant Consortium in each State consists of colleges, universities, industry, and other organizations that have an interest in aeronautics and space education. Each consortium receives NASA funds for use in implementing a balanced program of research, education, and public service.

Oklahoma Space Grant Consortium University of Oklahoma College of Geosciences 100 East Boyd Avenue, Suite 1210 Norman, OK 73019-0628 (405) 325-1240

### **Texas**

### ▶ Department of Agriculture (USDA)

#### 4-H State Leader

The State 4-H Youth Development Programs are administered by the Cooperative Extension Service at land-grant universities. State 4-H leaders coordinate outreach services and training to all county offices.

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Dr. Lynne W. Thibodeaux, Assistant Director for 4-H and Youth Development Texas A&M University 809 University Drive, East, Building D&E College Station, TX 77843-2473 (409) 845-1211 / Fax: (409) 845-6495 E-mail: l-thibodeaux@tamu.edu

### Ag in the Classroom State Leader

This program promotes increased understanding of agriculture and possible careers in the agricultural sciences. With National leadership provided by USDA, each State manages its own programs, with assistance from agribusiness, educational institutions, and government.

Tad Duncan Texas Farm Bureau PO Box 2689 Waco, TX 76702-2689 (817) 772-3030 / Fax: (817) 772-3628

# ► Department of Commerce (DOC)

### Flower Garden Banks National Marine Sanctuary

The sanctuary offers educational materials and in-school presentations.

Shelley Dupuy, Education Coordinator Flower Garden Banks National Marine Sanctuary 1716 Briarcrest Drive, Suite 702

Bryant, TX 77802 (409) 779-2705 / Fax: (409) 779-2234

### National Sea Grant College Program, Operation Pathfinder

The program consists of two-week summer courses that present an introduction to oceanographic and coastal processes. Courses are available in six regions and are designed to enhance skills in science teaching.

Sharon Walker Mississippi-Alabama Sea Grant Consortium and Gulf Coast Research Laboratory PO Box 7000 Ocean Springs, MS 39566-7000 (601) 374-5550 / Fax: (601) 374-5559

# ► Department of Defense (DoD)

### **Brooks Air Force Base**

The base offers in-class speakers and presentations upon request and also manages a high school student research program. A student summer intern program is also available.

Brooks Air Force Base HSC/PA 2510 Kennedy Circle, Suite 1 Brooks Air Force Base, TX 78235-5020 (210) 536-3234

### Chief of Naval Air Training, Corpus Christi

This unit participates in the Navy Community Service Program through formation of partnerships with schools and other youth organizations in the area.

CNATRA, Corpus Christi TX Commander Chief of Naval Air Training 250 Lexington Boulevard, Suite 102 Code 00A2 Corpus Christi, TX 78419-5041 (512) 939-3502

## ► Department of Education (ED)

#### **Eisenhower State Coordinators**

Eisenhower State Coordinators administer the Eisenhower Professional Development Program State Formula grants. The program focuses on sustained and intensive high-quality professional development through inservice programs.

Cory Green
Eisenhower Professional Development
Program
Texas Education Agency
1701 North Congress
Austin, TX 78701
(512) 463-9006 / Fax: (512) 475-2619

### **Eisenhower State Coordinators** for Higher Education

Eisenhower State Coordinators oversee the Eisenhower Professional Development State Formula Grants for the State Agency for Higher Education (SAHE). The program focuses on teacher enhancement through both inservice and preservice programs.

Eisenhower Professional Development Program Texas Higher Education Coordinating Board 7745 Chevy Chase, Building #5 PO Box 12788, Capitol Station Austin, TX 78711 (512) 483-6319/6224 / Fax: (512) 483-6522

# South Central Regional Technology in Education Consortium (SCR\*TEC)

ED established the Regional Technology in Education Consortia (R\*TEC) program in the fall of 1995 to help States, districts,

schools, adult literacy centers, and other educational institutions use advanced technology to support improved teaching and student achievement. R\*TEC's role in educational technology is unique in two ways: the emphasis is regional and the primary goal is to ensure that technology is used effectively to support school reform. Program strategies include professional development, technical assistance, and information dissemination.

Jerry D. Chaffin and Ron Aust, Co-Directors SCR\*TEC
Center for Research on Learning
University of Kansas
Suite 2021—Dole Human Development
Building
Lawrence, KS 66045
(913) 864-0699 or 4954
Fax: (913) 864-4149
WWW: http://scrtec.org/

Stephen Balkcom, R\*TEC Project Officer U.S. Department of Education Office of Educational Research and Improvement ORAD/SLSD, Room 506g 555 New Jersey Avenue NW Washington, DC 20208-5644 (202) 219-2089 E-mail: sbalkcom@inet.ed.gov

### Southwest Consortium for the Improvement of Mathematics and Science Teaching (SCIMAST)

The Eisenhower Regional Consortium provides information and technical assistance to help States and school districts improve mathematics and science education.

Stephen Marble, Director SCIMAST 211 East Seventh Street Austin, TX 78701 (512) 476-6861 / Fax: (512) 476-2286 WWW: http://www.sedl.org/sedl/ scimast.html

## Southwest Educational Development Laboratory (SEDL)

SEDL identifies effective teaching techniques and school improvement efforts within the region and shares this information with State and local educators.

Wesley A. Hoover, Executive Director SEDL 211 East Seventh Street Austin, TX 78701 (512) 476-6861 / Fax: (512) 476-2286 WWW: http://www.sedl.org



# ► Department of Energy (DOE)

#### **Pantex Plant**

Educational Outreach programs are designed to promote interest in science, math, and engineering among students attending K-12 educational institutions within Region XVI, the 26-county region in which Pantex is located. The region comprises approximately 79.400 students and 6,000 teachers. Many programs will directly impact at-risk students and students already identified as interested in the sciences. The primary message to students is that science, math, and engineering should be considered as major fields of study in higher education and as career choices. Pantex offers student tours, science fairs, and academic contests, loans New Explorers Videos and teacher guides, and also sponsors a teacher internship program.

Debra Halliday, Educational Outreach Coordinator Pantex Plant External Affairs Building 16-12 PO Box 30020 Amarillo, TX 79177 (806) 477-5038 / Fax: (806) 477-5743 E-mail: dhallida@pantex.com

# ► Department of the Interior (DOI)

#### **Aransas National Wildlife Refuge**

The refuge participates in Project WILD and Aquatic WILD, an interdisciplinary, supplementary environmental and conservation education programs emphasizing wildlife.

Smokey Cranfill, Outdoor Recreation Planner Aransas NWR PO Box 100 Austwell, TX 77990 (512) 286-3559 or 3533 Fax: (512) 286-3722

### Arlington Ecological Services Field Office

The Endangered Species Resource Trunk provides Texas students with an awareness of the plight of endangered species in Texas and worldwide, and what is being done to recover their populations.

The Fish and Wildlife Conservation Trunk provides Texas students with an understanding of fish and wildlife populations in Texas and what is being done to conserve them.

Robert M. Short, Field Supervisor Arlington Ecological Services Field Office 711 Stadium Drive, Suite 252 Arlington, TX 76011 (817) 885-7830 / Fax: (817) 885-7835

### Attwater Prairie Chicken National Wildlife Refuge

In the Teacher's Natural Resource Seminar, teachers from around the State of Texas are introduced to basic ecosystem concepts and other environmental ideas with hands-on activities to enhance their knowledge of environmental subjects.

Terry A. Rossignol, Refuge Operations Specialist Attwater Prairie Chicken NWR PO Box 519 Eagle Lake, TX 77434 (409) 234-3021 / Fax: (409) 234-3278

### Balcones Canyonlands National Wildlife Refuge

Staff provide onsite talks and presentations to local school children at the request of their schools. The refuge also coordinates all aspects of the Junior Duck Stamp Contest in the State of Texas. This involves instructing teachers and children on how to depict waterfowl in a natural setting, visiting schools to make them aware of the educational benefits of participating in the contest, judging the contest, generating publicity, and providing other information as needed.

Deborah Holle, Refuge Manager Balcones Canyonlands NWR 10711 Burnet Road, Suite 201 Austin, TX 78758 (512) 339-9432 / Fax: (512) 339-9453

#### **Big Thicket National Preserve**

The preserve offers interdisciplinary, curriculum-based environmental education programs for all age groups. Accredited teacher workshops are offered.

Other programs include the following:

- based, interdisciplinary programs for early and upper elementary students. The programs meet Texas State Essential Elements requirements and are based on Big Thicket regional resource management research and critical issues. Activities are age appropriate and use interactive methods to develop an understanding and commitment to environmental preservation.
- Big Thicket—A Biological Crossroads is a secondary curriculum guide that synthesizes environmental studies into a whole to promote appreciation of the Big Thicket. Facts are presented in an unbi-

ased fashion to give students the opportunity to make educated decisions regarding their environment.

- Environmental Education Skills is for professional development of front-line people who deal with school and youth groups, develop and present education programs and materials, and serve as liaisons with local teachers and education professionals.
- Project Wild—Big Thicket is a supplementary, interdisciplinary environment and conservation education program for educators.

Leslie E. DuBey, Resource Education Specialist Big Thicket National Preserve 3785 Milam Beaumont, TX 77701 (409) 839-2689/ Fax: (409) 838-2599 E-mail: Leslie\_Dubey@NPS.gov

### **Bureau of Land Management State Office**

This office provides information about educational programs, materials, and local land-management issues.

Theresa Herrera Bureau of Land Management PO Box 27115 Santa Fe, NM 87502-0115 (505) 438-7841

# Career Oriented Science and Mathematics Integrated Course (COSMIC)

This three-week summer program is designed to encourage girls in exploring future careers in the fields of science and math. Participants meet women professionals in various fields.

Gail B. Rainey, Physical Oceanographer 1201 Elmwood Park Boulevard New Orleans, LA 70123 (504) 736-2792 / Fax: (504) 736- 2610

#### **Guadalupe Mountains National Park**

In Field Trip to the Guadalupe Mountains, students are introduced to the various life zones of the park and learn about the prehistoric and historic occupants of the area.

Richard McCamant, Chief Interpretation and Visitor Services Guadalupe Mountains National Park HC 60, Box 400 Salt Flat, TX 79847 (915) 828-3251 / Fax: (915) 828-3269

### Matagorda Island Environmental Education and Research Program

This program consists of prepared minicourses on all phases of the ecology, geology, and cultural history of the island. Research is offered on



selected topics including ecology, endangered species, and wildlife management.

Wayne H. McAlister, Environmental **Education Specialist** Matagorda Island NWR PO Box 100 Austwell, TX 77901 (512) 286-3559 / Fax: (512) 286-3722

### Minerals Management Service (MMS) Regional Office

The MMS Regional Office provides a range of educational services. Teacher inservice programs and classroom visitations may include supplemental materials. Availability may be limited, but arrangements may be made for duplication of some materials at minimal cost.

Gulf of Mexico Outer Continental Shelf Region Minerals Management Service Office of Public Affairs 1201 Elmwood Park Boulevard, MS 5000 New Orleans, LA 70123-2394 (504) 736-2595 (800) 200-GULF / Fax: (504) 736-2459

#### Padre Island National Seashore

Environmental programs, guided nature walks, and in-school presentations are offered by Padre Island National Seashore.

Other programs include the following:

- Ecosystem of Padre Island allows students to explore the beach, grasslands, and mud flats found on Padre Island. Through a series of data collection activities, the students begin to understand the complex ecosystem of the Island.
- A Grain of Salt lets students use scientific data gathering techniques to deduce that the natural elements in our environment have a direct relation to the survival of many plants and animals found on Padre Island.
- It's for the Birds uses a series of activities to help students understand how birds adapt to the habitat found at Padre Island.
- ▶ Plants, Who Needs 'Em provides a series of on-site activities to help students explore the role plants play on the island and their interrelationship to the animals.
- The Traveling Trunk contains teacherdirected activities covering the historic aspect of European discovery of the area and scientific information and activities on the habitats of Padre Island.
- What's Awash in the Gulf uses activities to help students learn about marine debris and other pollution that enters the Gulf of

Mexico and eventually ends up on the beaches of Padre Island.

John Lujan, Chief of Interpretation Padre Island National Seashore 9405 South Padre Island Drive Corpus Christi, TX 78418 (512) 949-8173 / Fax: (512) 949-8023

#### **Project WILD**

Project WILD offers teacher training and educational materials. Teacher guides, free to teachers who attend the training session, contain more than 80 supplementary, interdisciplinary activities for grades K-12.

Kathryn Hampton, Project WILD Coordinator Texas Parks and Wildlife Department 4200 Smith School Road Austin, TX 78744 (512) 328-6035 / Fax: (512) 328-5632

### Santa Ana National Wildlife Reserve

The refuge provides teacher packets with lesson plans targeted for grades K-6, interpretive presentations, environmental education programs, and a visitor center that offers interpretive exhibits and displays. Fifty-two interpretive tram tours are offered to school groups of 60, free of charge. Groups are given an environmental education tour that discusses the flora and fauna and ecology of the area, and encourages students to participate in thinking of ways to preserve, protect, and expand habitat areas in the lower Rio Grande Valley.

Yvette Vasquez, Outdoor Recreation Planner Santa Ana NWR Route 2, Box 202-A Alamo, TX 78516 (210) 787-3079 / Fax: (210) 787-8338

### ▶ Department of Labor (DOL)

### Job Training Partnership Act (JTPA) Liaison

The JTPA Liaison can provide information about the Job Training Partnership Act State and local programs for economically disadvantaged adults and youth.

James E. Boyd, Director Work Force Development Division Texas Department of Commerce PO Box 12728-Capitol Station Austin, TX 78711-2728 (512) 320-9801 / Fax: (512) 320-9875

### **▶** Department of Transportation (DOT)

### Federal Aviation Administration (FAA) Aviation Education

The FAA Aviation Education Representative coordinates aviation education services. including materials and programs for the FAA in the States assigned to the region.

Programs include the following:

- ► The Aviation Career Education (ACE) Academy is a one-week summer aviation education program for high school students sponsored by the FAA along with a host educational institution. The program provides students with diverse experiences in aviation career exploration. The focus is on aviation career clusters identified by FAA, with an emphasis on opportunities for women and minorities. A goal is to have one program in each State and U.S. Territory. The FAA will conduct regional leadership workshops and provide funds based on the availability of resources.
- Aviation Education Workshops for Teachers provide teachers with information on FAA aviation programs and materials and prepare them to teach aviation in the classroom. Annual workshops are conducted at colleges and universities across the Nation. The FAA provides information, materials, and speakers for the pro-
- National Congress on Aviation and Space Education is sponsored annually by the FAA in partnership with the National Aeronautics and Space Administration and the Civil Air Patrol. The meeting includes teacher workshops and crosstalk sessions to exchange ideas on promoting aerospace education.

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### FAA Aviation Education Resource Centers

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Isaac Nettey, Director Aviation Education Resource Center Texas Southern University Airway Science Program 3100 Cleburne Avenue Houston, TX 77004 (713) 639-1847

Olin Lancaster, Director Aviation Education Resource Center Frontiers of Flight Museum Love Field Terminal, BL-38 Dallas, TX 75235 (214) 350-3600

Bruce Hoover Aviation Education Resource Center Palo Alto College Aviation Department 1400 West Villarette San Antonio, TX 78224 (512) 921-5162

Campus Librarian Aviation Education Resource Center Texas State Technical College Aerospace Technologies 3801 Campus Drive Waco, TX 78708 (817) 799-3611

Dr. Jim Milson, Chairman Aviation Education Resource Center University of Texas at El Paso Education Building, Room 403 El Paso, TX 79968-0574 (915) 747-5426

# ► Environmental Protection Agency (EPA)

#### **EPA** Regional Office

This office takes part in a variety of environmental education programs for both teachers and students. Programs range from teacher workshops and student contests to in-school presentations. Information on environmental issues is also available through the Public Information Center located at the office.

Jo Taylor, Environmental Education Coordinator Environmental Protection Agency 1445 Ross Avenue (6X) Dallas, TX 75202 (214) 655-2204 / Fax: (214) 655-2118

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groups, and youth organizations to promote environmental awareness and community involvement. The two components of the program are the regional certificate program and the National awards competition. Regional certificates, signed by the President, are awarded to each participant by EPA Regional Offices. National individual project winners, or one representative from a National awardwinning group project, along with one sponsor, are honored at EPA headquarters, Washington, DC. Interested K-12 individuals or groups may obtain application materials and contest rules by contacting the EPA Regional Office that serves their State. PEYA has been an ongoing project since it was created by the White House Office of Education and the EPA in 1971.

EPA Region 6 1445 Ross Avenue Dallas, TX 75202-2733 (214) 655-2204 / Fax: (214) 655-2118

# ► National Aeronautics and Space Administration (NASA)

#### **NASA Educator Resource Center**

The center has NASA-related educational materials in various formats, including laserdiscs, CD-ROMs, videotapes, slides, audiotapes, publications, and teacher guides. Educators may preview or copy NASA materials upon request.

NASA Johnson Space Center Educator Resource Center Mail Code AP-2 2101 NASA Road One Houston, TX 77058-3696 (713) 483-8696

#### **NASA Field Centers**

Each field center has an educational programs officer who is responsible for precollege education programs. In addition to administering National programs, the center offers programs and services to meet regional and local needs.

Dr. Robert W. Fitzmaurice Center Education Programs Officer Public Affairs Office AP2 NASA Johnson Space Center 2101 NASA Road One Houston, TX 77058-3696 (713) 483-1257

#### **Space Grant Consortium**

The Space Grant Consortium in each State consists of colleges, universities, industry, and other organizations that have an interest in

aeronautics and space education. Each consortium receives NASA funds for use in implementing a balanced program of research, education, and public service.

Texas Space Grant Consortium 2901 North IH 35, Suite 200 Austin, TX 78722-2348 (512) 471-3583 (800) 248-8742

# ► National Science Foundation (NSF)

### Texas Statewide Systemic Initiatives (SSI) Program

The Texas SSI Program will focus on changes in teacher development. Strategies include Renaissance Centers to house teams of master teachers, scientists, mathematicians, and higher education faculty to reform preservice and inservice programs; the involvement of business, industry, and universities to work with educational service centers and school districts; and the establishment of an infrastructure for distance learning.

Uri Triesman Mathematics Department University of Texas Austin, TX 78712 (512) 471-6190 / Fax: (512) 471-6193





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